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**TRAINEE'S MANUAL
VILLAGE
HEALTH
PROMOTER**

**HEALTH CARE TRAINING MANUAL
FOR THE VILLAGE HEALTH PROMOTER**

Trainee's Manual

PROJECT CONCERN INTERNATIONAL

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DEDICATION

Project Concern International dedicates this manual to all the people who will benefit from the services of the Village Health Promoter. May these trained health workers fulfill the dream of better health for more people throughout the world.

NOTE

The manual has been designed for use in a training environment which utilizes both nonformal and formal training techniques. It becomes a useful reference tool for the health worker upon completion of training.

The accompanying Instructor's Manual is meant to assist the trainers or facilitators in completing or "rounding out" the trainee's experience.

In this book the Village Health Promoter is considered as being synonymous with such other health personnel as Village Health Worker, Health Auxiliary, Health Assistant, Medical Dresser, Medical Auxiliary, etc.

A. BASIC COURSE

TO THE TRAINEE



The Village Health Promoter is a responsible and good person who is eager to help his fellow villagers.

You are to become a Village Health Promoter. You will learn how to make sick people well and how to keep healthy people from becoming sick. The work of a Village Health Promoter is hard, but it makes you feel that you have done something good for other people.

To do this work a special kind of person is needed. What special kind of person? A responsible person. An honest and good person. A person who is very eager to help.

The health promoter knows that life can be better for himself and for others. In fact, he wants it that way. So he lets the villagers know that they can overcome many of their health problems if they believe they can and if they are willing to try.

The health promoter is eager to learn new things that he can teach to his villagers. Then he can help them meet their goal of better health. At the same time, however, he understands that he does not know everything. He is proud about his work, but he does not feel better than his fellow villagers. He knows what he can and cannot do.

The Village Health Promoter is part of a health team. He is not the only one giving health care. As a result, he always seeks the help of more experienced health workers when he needs to. He also works well with others: his supervisors and the important people in the community. The health promoter carefully watches and listens to these people. From them he can learn many things, such as how to work with the patients.

The Villager Health Promoter is also a leader in his community. But he does not use his position for wrong. He respects the ideas and ways of life in his village. He shows kindness to all the people he serves. He also has patience with them as he tries to teach them ways to have better health. He listens to his patients carefully so that he can thoroughly understand their health problems before correcting them.

The Village Health Promoter must remember: what you do is as important as what you say. The villagers will look to you. They will watch you and then do what you do. For example, the health promoter tells the villagers that it is important to use a latrine. The villagers see that the health promoter uses a latrine. They then believe that it really must be important to use a latrine. If the villagers see you do something, they will do it. But if you do not do it, they will not do it either! Remember: teach good health by practicing it yourself.

It is important, then, for the Villager Health Promoter to ask questions about things he does not understand - both during and after the training. Your teachers and the people who wrote this book are eager for you to become a Village Health Promoter. May you do well in your studies.

INTRODUCTION

A. WHAT THE VILLAGE HEALTH PROMOTER DOES

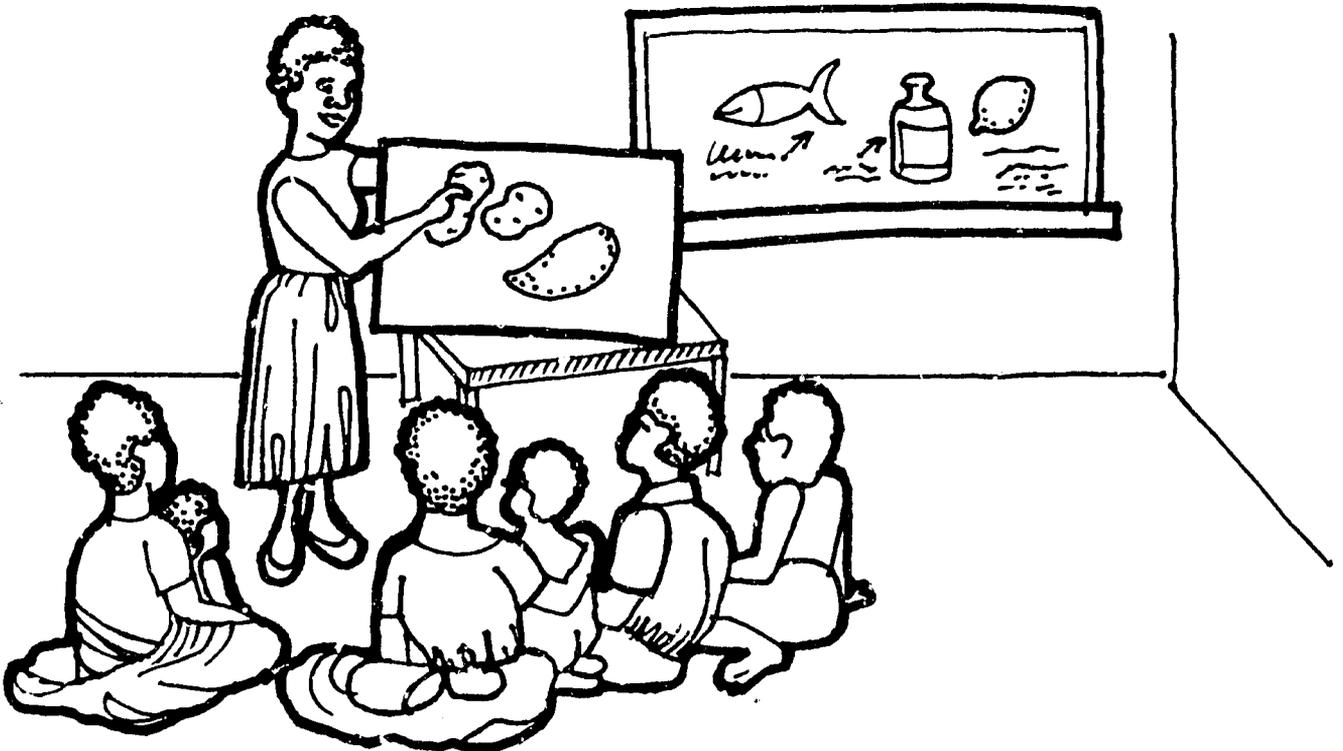
The Village Health Promoter has many responsibilities and duties. It will be useful to list them before you begin your studies. In this way you will know what you will be doing on your new job.

1. The Village Health Promoter helps the people in his village have good health. He is someone they can come to when they have questions about their health.
2. The Village Health Promoter treats anyone who is sick. If he cannot, then he refers the patient to the health post. There the patient can get help. The Village Health Promoter always refers a patient; to the health post if he has any doubt about what to do. The Village Health Promoter must know what he can and cannot do.
3. The Village Health Promoter treats ALL patients whether the person is a friend or not. He treats them with dignity, courtesy, and kindness - just as a Village Health Promoter would like to be treated if he were a patient.
4. He listens carefully to his patients. Sometimes just having someone who will listen helps a person feel better.
5. Patients place special trust in the Village Health Promoter. The Village Health Promoter does not gossip about his patients and their health problems. He respects their trust and keeps their cases confidential. He only discusses a case with the proper health officials.
6. The Village Health Promoter treats his patients with what he has been taught. He does not treat his patients with any gossip he hears. Nor does he give a certain medicine to a patient just because the patient asks for it. It can be dangerous to give medicine when a person does not need it. The Village Health Promoter NEVER gives treatment for any reason except as taught.
7. If patients do not understand what to do with the medicine, the Village Health Promoter shows how to take or use the medicine. Above all, the patient must understand what he is told. The Village Health Promoter makes himself clearly understood.
8. He searches for people who have illnesses which spread easily. He treats these people. Then he works to keep the illness from spreading to other people.
9. Through observation and surveys, he collects information about the village's health problems. He then comes to know what the needs of the village are.
10. He teaches his villagers healthful practices that will help them fight off illnesses. He helps them have the desire to follow these practices whenever he has a chance. One of these practices is to eat food from three different food groups three times a day. Good food has things in it which people need to become and stay healthy.
11. REMEMBER: A Village Health Promoter never misses the chance to teach his villagers about better health practices. He always tells the villagers that it is better to prevent illness from happening. Then he tells them how to do this. This is called health education.

12. The Village Health Promoter knows the right time to give health education and the right time to let people know they are doing a good or bad job of following his advice. For example a mother brings a sick, hungry child to the Village Health Promoter. He does not ask the mother why she does not feed her child, otherwise she may not come back again. Instead, he treats the child first and then tells the mother how enough good food helps a child stay well. He does not make the mother feel stupid or guilty. He only teaches her things to make the health of her child better.
13. The Village Health Promoter must work with the beliefs and customs of his village. Good beliefs and customs should be praised. Bad ones should be changed through teaching. Leave alone those that are neither good nor bad - ones that don't make any difference.
14. He seeks help from important people in the village, such as the village leader, the school teacher, and the traditional health person. The Village Health Promoter works with these people - not against them. Better health for the village comes from working with these people.

You now know what the duties of the Village Health Promoter are. Of all these duties the most important one is health education - teaching your fellow villagers better health practices so that they can help prevent illness from happening. A person may come to you time and time again with the same illness. When he is taught things which help him prevent illness, then he will not have to come so often.

Health education is the key to a good health program.



Whenever possible, the Village Health Promoter teaches the villagers ways to prevent illness.

B. WHOM THE VILLAGE HEALTH PROMOTER HELPS

The people you will see most often with their illnesses are mothers and their children, especially the children under five years of age. Mothers and children have health problems which need special attention and treatment. It is good to know why mothers and children need special care:

1. Most of the people who live in the village are mothers and children.
2. It is the mother who is responsible for the health of the family. She must stay in good health herself, especially if she is pregnant or if she is breast-feeding.
3. Children very easily become sick. They cannot tell you about their illnesses. They cannot even tell you when they are sick. So give them your attention.
4. Illnesses in children and illnesses during pregnancy can be prevented.
5. The future of the village needs healthy children.



Mothers and children need special care. Give much attention to their needs.

In this group there are some mothers and children who need even more special attention. Who are some of these?

- *Women who are pregnant.
- *Women who are breast-feeding.
- *Women who have lost children in childbirth or shortly thereafter
- *Children who are being taken off of breast milk.
- *Children who are not gaining weight.

Such people as these more easily become sick than other people. At the first sign of sickness, they should see you. Then you can treat them. If they wait too long before they see you, they will be so sick that all you can do is refer them to the health post.

Tell all mothers to see you when they or their children start to feel sick. Then there will be less suffering and misery. Remember: the first step to take at the first sign of sickness is toward the Village Health Promoter.

Because you will make sick people well and keep healthy people from becoming sick, your village will respect you. You must always live up to that respect and never let your village down.

Even though your job will be rewarding, there will be times when nothing goes right. You will feel unhappy. You must still live up to the respect of your village. And also remember: if you help only one person make his health - and life - better, then all of your efforts will be worthwhile.

TAKE THE FIRST STEP:
GO TO THE VILLAGE HEALTH PROMOTER.

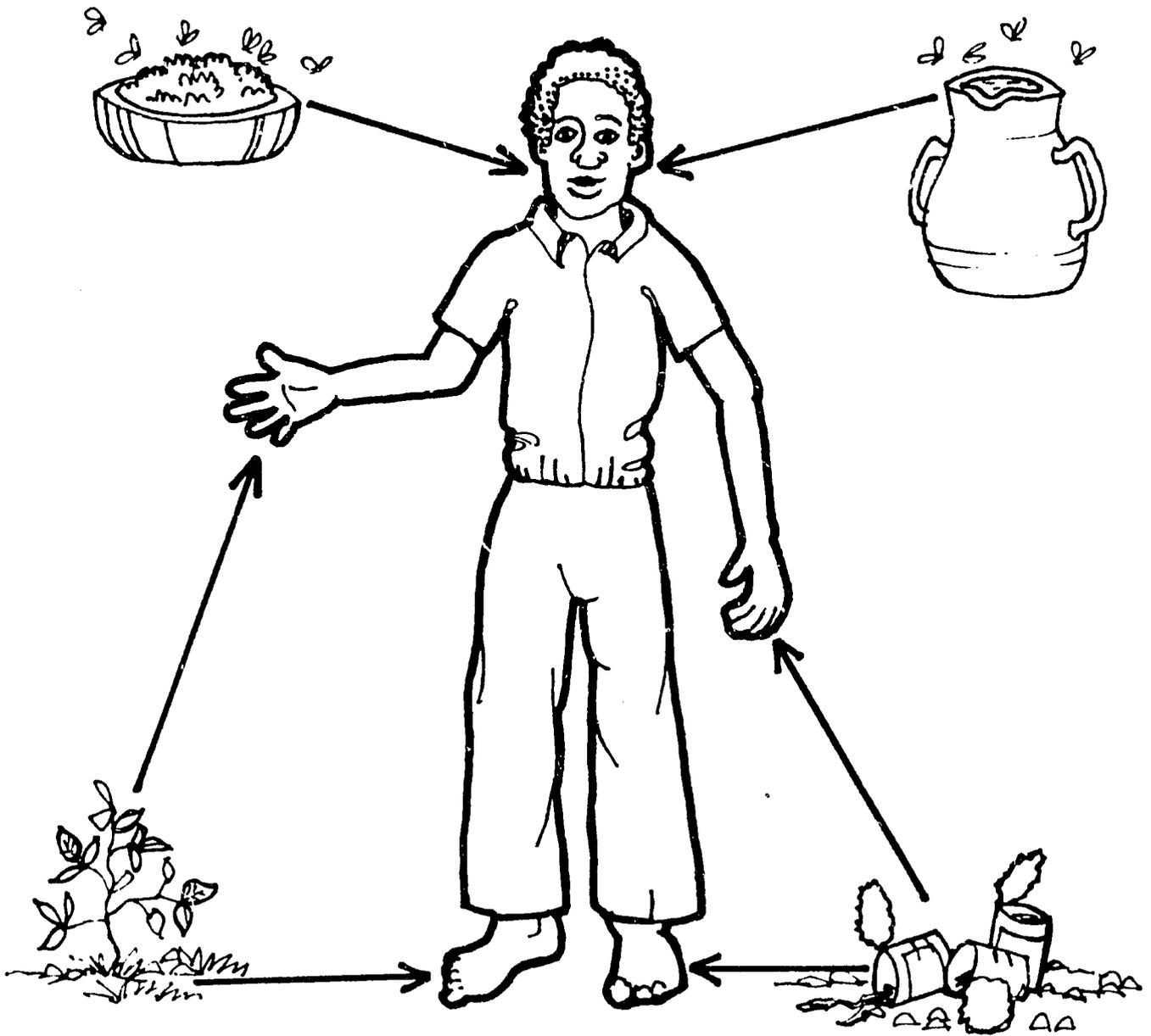
WHAT CAUSES SICKNESS?

You know when a person is sick because he does not feel well. He feels bad. But do you know what makes a person sick? The answer is germs.

Germs are such tiny things that you cannot even see them with your eyes. But they are there. Even though they are so small, germs do much harm.

These harmful germs can be found in many places such as in dirty water, in feces, on bug, in the air, and in food. When the bad germs go into your body, they make you sick.

How do they get into your body? In many ways. You can breathe in the germs or swallow them when you take a drink of bad water. You can also swallow them when you eat bad food. Germs can even go through your skin. They can go inside a cut or scratch on your hands, feet or another part of your body. Germs can even be on your hands. If you put your hands to your mouth, the germs will go in and make you sick.



This picture shows many ways that germs can get inside your body.

Are these the only ways that germs can make you sick? The answer is "no."

Germs have many tiny friends around your house and around your village. These "friends" are bugs - mosquitoes, fleas, lice, and flies. They do bad things to man. These bugs pick up the germ that causes illness from a sick person and then spread the illness to a healthy person.

Let us see how bugs can pick up germs and then spread sickness. The bug can get the germ in three ways:

1. The bug bites a sick person.
2. The bug lands on the feces, urine or spit of a sick person.
3. The bug lands on and touches anything which a sick person has touched or used, such as food, clothing, towels, eating utensils.

Once the bug has the germ, it is now ready to spread the sickness. The bug can spread the sickness in two ways:

1. The bug bites the healthy person and gives him the sickness - like the mosquito which bites a person and gives him malaria.
2. The bug lands on the healthy person's food, eating utensils, clothes, or anything else he uses. The germs fall off the bug and stay behind when the bug leaves. For example, flies land on feces poisoned with roundworm and then land on someone's food. The flies will make the food bad with germs that cause roundworm.

Throughout the training manual, you will be taught ways to do away with bugs so that they will not spread the germs which make you sick.

KEEPING CLEAN

KEEP YOUR BODY AND HAIR CLEAN

As you do all those things that are part of your day-to-day life, your body can become dirty. A dirty body attracts bugs which make you itch. The dirt on the body also helps to spread sickness. It is important, then, to keep the body clean. So wash your body with soap and water - every day! And then put on clean clothes. Never put dirty clothes on a clean body. It does no good to put dirty clothes on a clean body. You will only get dirty immediately. Any germs in your clothes will continue to spread sickness to you and to others.

Remember: clean clothes on a clean body.

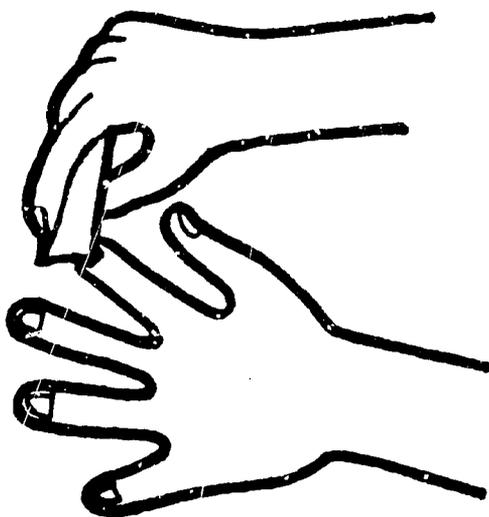


It is also necessary to keep your hands clean. Dirty hands spread germs which cause sickness. Clean hands do not. So wash your hands before you eat and before you handle food, dishes or other eating utensils. Your hands should also be clean when handling a sick person or a baby.

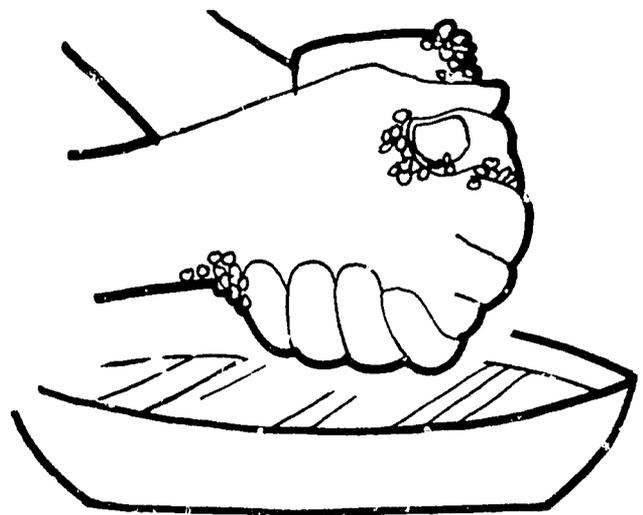
There are even times when you should wash your hands after you do something. So wash your hands after relieving yourself and after working with animals or in the garden. You should also wash your hands after handling a sick person.

Give special attention to your fingernails. Dirt and germs like to stay under fingernails. So wash your fingernails thoroughly, and, then, cut them short. Now the dirt and germs have no place to hide.

It may take extra time and work to wash your hands when you should. But it is time and work well-spent. Why? Because keeping your hands clean prevents germs from spreading sickness.



Cut your nails.



Wash your hands with soap and water.

Besides your body and your hands, you must also wash your hair - at least once a week. When you wash your hair, use soap and good, clean water (water that has been boiled first). After you wash and rinse your hair, dry it thoroughly.

Even though you do not wash your hair everyday, you should brush or comb it everyday. To keep the brushes and combs clean wash them every time you wash your hair.



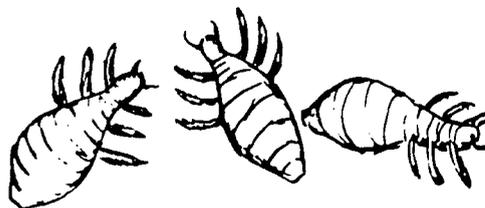
In the last chapter you learned that bugs can be a health problem. Lice are tiny bugs which are a big health problem - in your hair and on your body. Why should lice be a big problem. There are two reasons:

1. Because people do not wash themselves as often as they should. A dirty body and dirty hair attract lice.
2. Because people must live crowded together in a small house. As a result, the lice can spread easily from one person to another.

You should regularly check your body and your hair for any lice or lice eggs. (The eggs are tiny white spots sticking on the hair.) Lice usually cause you to itch. That is one sign which tells you that you may have lice.



This woman is checking her daughter's hair for lice.



This is an enlarged picture of what lice look like.

If you have lice, then you must do something about them. You must use the special lice powder in your health bag:

1. Lice on the Body - Dust the inside of your clothing once a week until the lice are no longer a problem.

2. Lice in the Hair -- Shake a little powder onto your hair. Keep your eyes closed so that none of the powder goes into them. Then massage the powder into your hair. Do not wash your hair for ten days. After you wash the powder out of your hair, apply the powder for a second time. Using the powder twice should kill all the lice and their eggs. If not, continue to use the powder until the lice and their eggs are gone.

Although lice powder is necessary, it is important to always wash regularly.

A clean body and clean hair help control lice and their eggs.

TAKE CARE OF YOUR TEETH

Your teeth are important things. Without them you could not chew your food. Think how hard it would be to eat a handful of nuts or a piece of chicken without your teeth.

To protect your teeth from harm you must take care of them. This means that you must brush them. Brushing your teeth takes away food that sticks to your teeth. Food which sticks to your teeth will, in time, make your teeth bad.

Brush your teeth with salt and good water. Brush them often - after every meal and before you go to sleep. Only use your own toothbrush so that you do not spread sickness.

If you do not have a toothbrush, you can make one. Take a short twig from a tree made of soft wood. (Hard wood will harm the teeth.) Peel off one inch of the bark at one end of the twig. Make that end of the twig into a brush by pounding, chewing or shredding it. Now you have a toothbrush to keep your teeth healthy.



KEEP YOUR CLOTHES CLEAN

It is not good to put on dirty clothes after you have made your body clean by washing it. You would not put dirt onto a clean dish before using the dish. So why would you put dirty clothes on your clean body? You should put clean clothes on a clean body.

To have clean clothes you must wash your clothes often. Then dry them in the sun so that the sun can kill any germs that may be on the clothes.

Not only should you keep your clothes clean but also your bedding - your sheets, blankets, and things like these. These things should also be dried in the sun. Even though you do not wash your bedding every day, you should air it every few days to keep it fresh.



CARING FOR A SICK PERSON

When someone is sick in your home, there are some things to do around the house to care for the sick person. Here is a list of things to do:

1. Sometimes a sick person has an illness that he can spread easily to others. In this case, keep the sick person away from the other family members. He must be kept separate so that no one else can get the sickness. This is very important to remember.
2. A sick person should always sleep alone.
3. Wash your hands before and after you care for a sick person.
4. Be especially careful that the food and water are clean and good. The right food helps the sick person become healthy.
5. Boil all the dishes and other eating utensils that a sick person uses. Keep them in a separate place away from the dishes of the other family members.
6. When you do the washing, give special care to the clothes of the sick person. Boil the clothes and bedding of the sick person to kill any germs. Dry these things in the sun.
7. Everyday let fresh air into the room of the sick person.

WHAT TO TEACH THE VILLAGE

As the Village Health Promoter you have a big and important job. You must teach the villagers that it is a good thing to keep clean. You must also teach them all of the health habits you have learned. Before you review these health habits, remember this: if you keep your body and hair clean and practice the health habits, then it will be easier to teach others. Why? Because they see that you are doing all the things that you tell them. They will believe that what you tell them is good.

Here is a review of the health habits in this unit that you should teach to the villagers.

1. Wash your body with soap and water everyday.
2. Keep your hands clean and your fingernails cut short.
3. Wash your hair with soap and water once a week.
4. Brush or comb your hair everyday.
5. Treat all lice found in the hair.
6. Brush your teeth often with salt and good water.
7. Wash your clothes and bedding often. Dry them in the sun. Air the bedding often.
8. Put only clean clothes on a clean body.
9. Take special care of sick people in your home:
 - a. Feed them good food to grow strong.
 - b. Boil their dishes and keep them separate from the others.
 - c. Boil their clothes and bedding. Dry them in the sun.
 - d. When they have an illness which spreads easily, keep them away from other family members. They should always sleep alone.
 - e. Let fresh air in daily.

SANITATION

INTRODUCTION

The village in which you live is an important place. Your family has lived here for many years. You want your children to grow up strong so that they can live here for many years too. But will they be able to if the place in which they live is not healthy?

What answers would you give to the questions below about your village?

1. Does my village have clean, good water to drink?
2. Does my village have latrines, and do people use them?
3. Do the people in my village throw bottles, cans, and bones around their houses to pile up?
4. Is my village compound clean or dirty?
5. Do the people in my village handle food with dirty hands?
6. Do the people in my village keep food out of the sun and away from flies?

This unit will study the problems raised by these questions. It will tell you what is necessary to have a clean and healthy place in which to live.

WATER

It is important to good health for a person to drink and to use water. It is necessary for life. Without water a person would die. Water may come from a well, irrigation ditch, river, stream or lake. It can even be rain water that has been saved. But is all water good to use? The answer is NO. Not all water is good to use. Some water is bad to use - like water from an open well or a muddy river. Even clean water that looks good to use may be bad. Bad water can make a person ill.

What kind of illnesses can bad water cause? Bad water can cause diarrhea and painful sickness in the stomach. Using bad water puts your health - and your life - in danger.

Is there any way to tell if water is good to use? There are some tests which can be done in a laboratory. You will be asked to help with these tests later. But for now just remember this:

1. If the water does not look clean, it is not good to use.
2. Water from an open well or an irrigation ditch is not good to use.
3. A water supply not protected from human or animal feces is also not good to use.

The best water comes from a deep well. Later in your training you will be taught how to build a deep well. Then you can teach the people in your village how to build one.

If there is no deep well in your town and if there is no source of good water, what do you do? There is a way to make bad water good. This is called boiling. Boiling water before it is used kills the germs in the water which make you sick.

Here are the steps to take when boiling water:

1. Fill a clean pot with water.
2. Put the pot on the fire and keep it there until the water bubbles.
3. Remove the pot, and pour the water into a container such as a pottery jar. But it must be clean - one that has been washed in good water.
4. Cover the container for storage. The water container must be covered to keep out dirt and to keep away flies, other insects, animals, etc., which spread disease. These things can make your water bad again if the water is left uncovered.

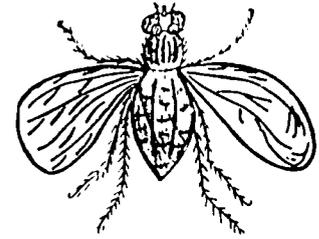


LATRINES

Can you answer this question: What is the name of a small, black bug, which does not bite and which flies around your home everyday? The answer is the fly. Did you know that the fly is very dangerous? It's true. Let's see why the fly is dangerous.

The fly lands on many dirty things, especially human feces. Small pieces of the feces stick to the hairs of the fly as it flies away. Feces are bad; they are filled with many germs which cause different diseases, such as diarrhea. The fly carries these germs along with the feces on the hairs of its tiny legs.

Another favorite landing spot of the fly is food. When it stops on the food someone is cooking or eating, the fly leaves the pieces of feces and all the bad germs behind. When you eat the food, you become sick. Let's try to understand this better. Would you go out and eat dirt or feces? Of course not. So you would not eat food that a fly has dirtied with pieces of feces.



The fly is very bad.
It spreads disease.

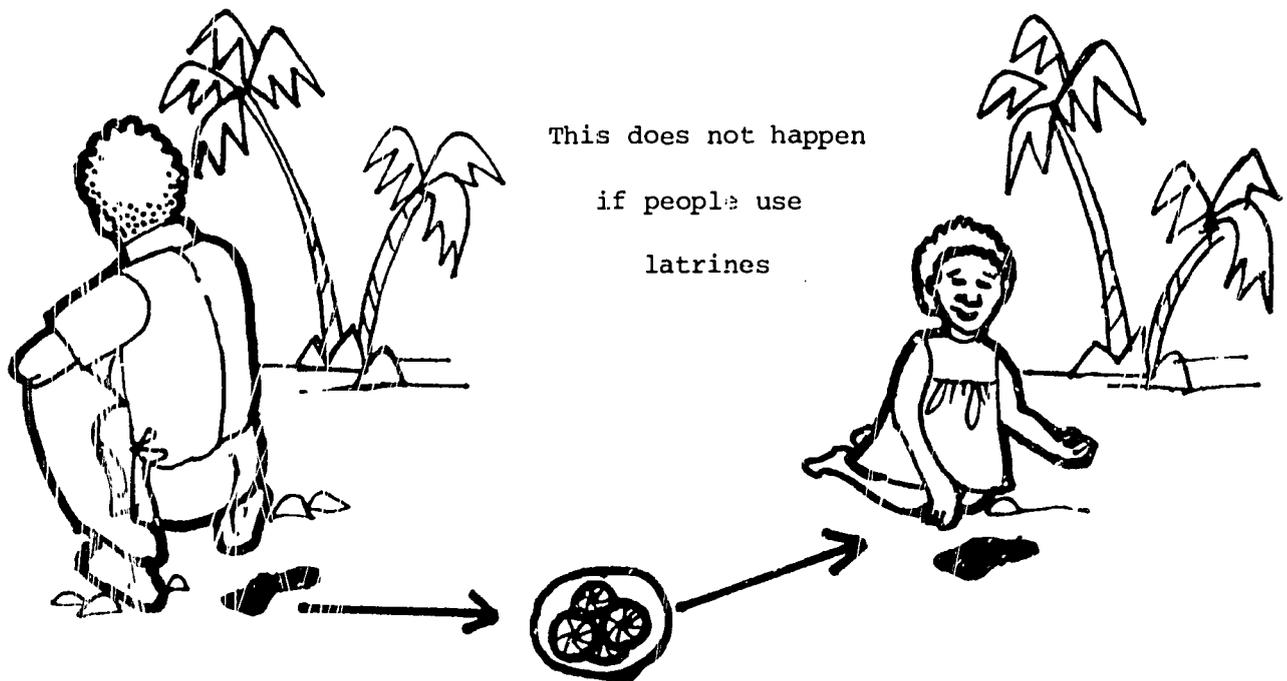
Let us see what can also happen when feces are left out in the open. A person defecates just off the side of the road. His feces are poisoned with disease. Later someone steps on the feces. As a result, he can get a disease from the feces, such as hookworm. Maybe the feces have decomposed and a child plays in the dirt where the feces have been. The child, too, can get the disease that is in the feces.

Perhaps a person defecates onto the ground where vegetables are growing. Then the vegetables can become bad to eat from the disease in the feces.

Not only should you be concerned about feces but also about urine. Urine, too, can have disease in it. Let us see how disease can be spread from the urine. A person urinates onto some green leaves. Later someone eats those leaves. As a result, he can get the disease that was in the urine.

Here is another example. A person urinates into the stream or lake. Doing so makes the water bad to drink from the disease in the urine.

You can now see why it is very important for everyone not to defecate or urinate out in the open. Everyone should use a latrine, a special place to defecate and urinate which helps to keep disease from spreading.



This child will become sick from playing in the dirt where someone has defecated.

Your teacher will show you how to build a latrine. But here are seven important things to remember.

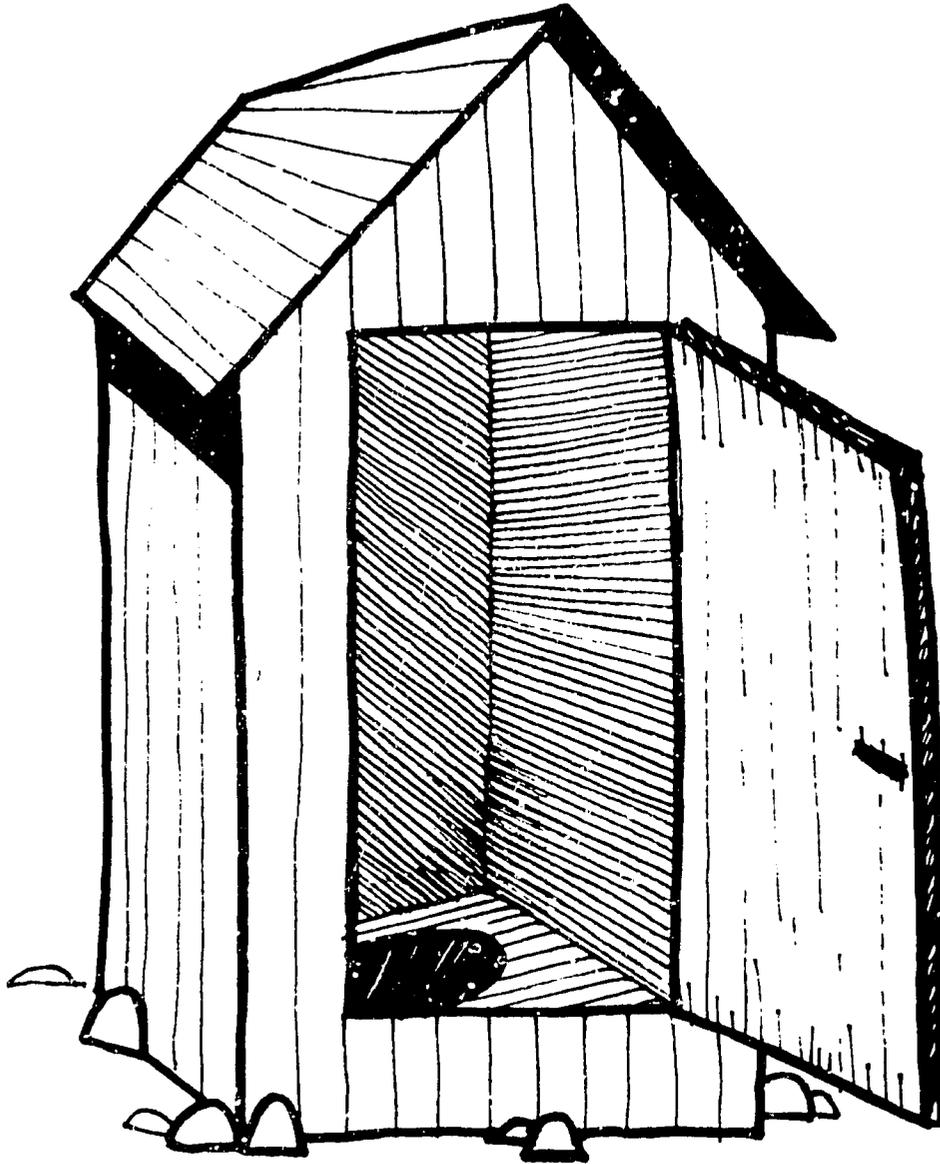
1. The latrine should NOT be near the water supply. It should be 100 feet from the water supply. And the latrine should be on land below the water supply. See picture #1.



Picture #1

2. Dig a pit 4 feet deep, 4 feet wide, and 4 feet long. Cover the pit with a wood floor.

3. Cut a hole 12 inches long by 6 inches wide in the floor. See picture #2. This hole should not be too big or else a child could fall through it.



Picture #2

4. Make a cover for the hole. When the latrine is not in use, the hole must be covered. Then the flies cannot land on the feces and spread disease.

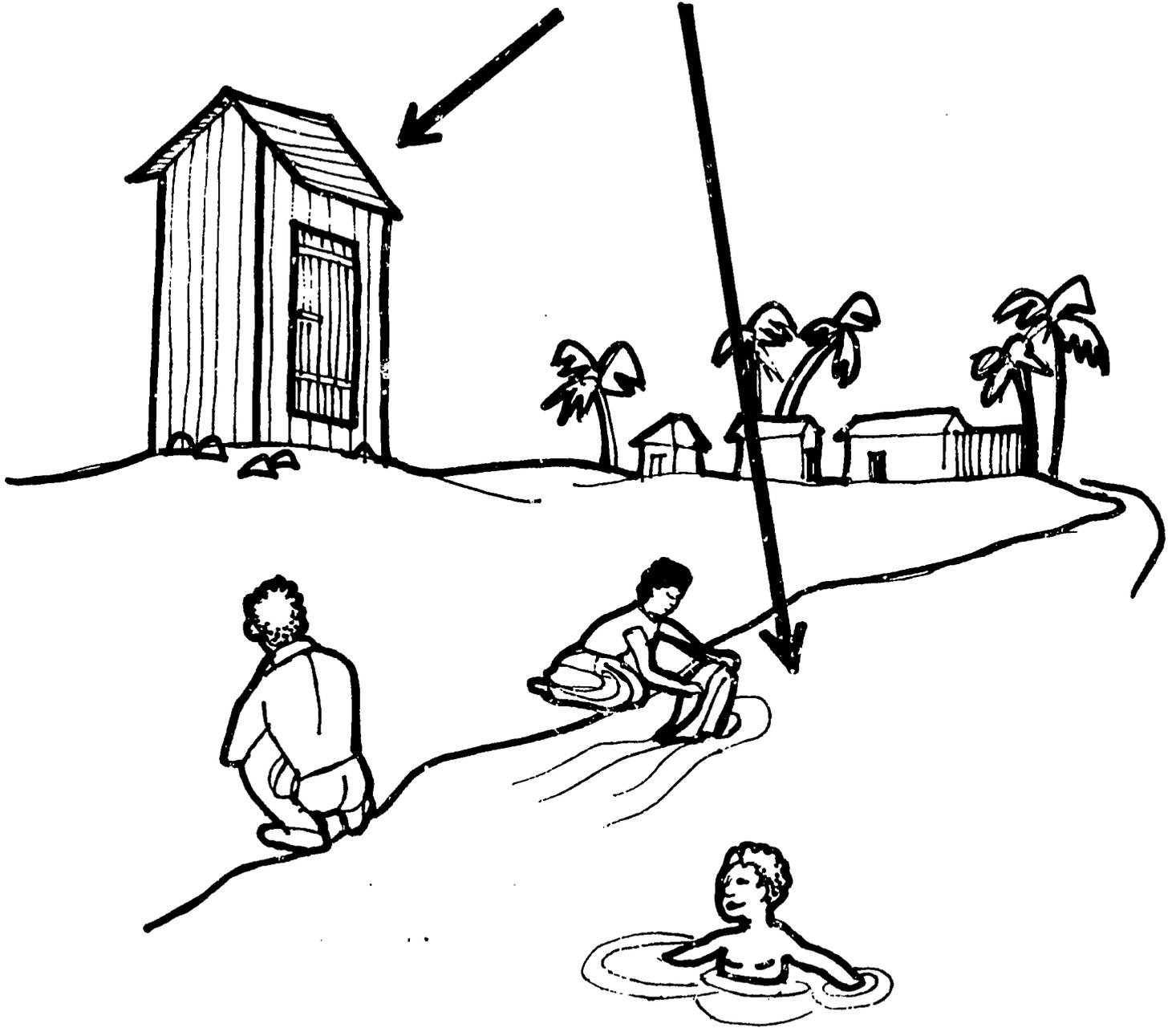
5. Around the latrine build walls about 5 feet wide, and 8 feet high. Make a door and roof.
6. In time the pit underneath the latrine will become full. The pit must be covered over and a new latrine built.
7. Each person in the village must be taught how to use the latrine properly AND why he must use it.

These seven points are a review. In class your teacher will give you details on how to build a latrine and how to use it. Then you will be able to teach others.

Sometimes there is no latrine to use. In this case, do what a cat does. Dig a little hole with your foot. Defecate or urinate into the hole. Cover with dirt by using your foot. Tell your fellow villagers about this.

USE THIS

NOT THIS

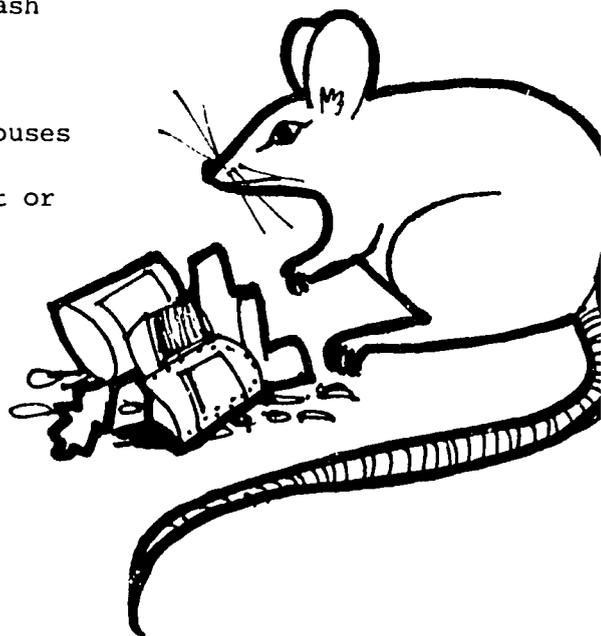


TRASH

Fruit pits, bones, paper, empty cans and bottles. What do you do with all this trash? Do you throw it out the window? Do you throw it on the ground and let it pile up? Do you throw it in the lake or river?

Trash thrown in the water makes the water bad to drink. Trash left to pile up and rot is a health problem. The fly can spread any disease it picks up from trash. Rats will come to dig in the trash. They also spread disease. They even bite people and cause more health problems.

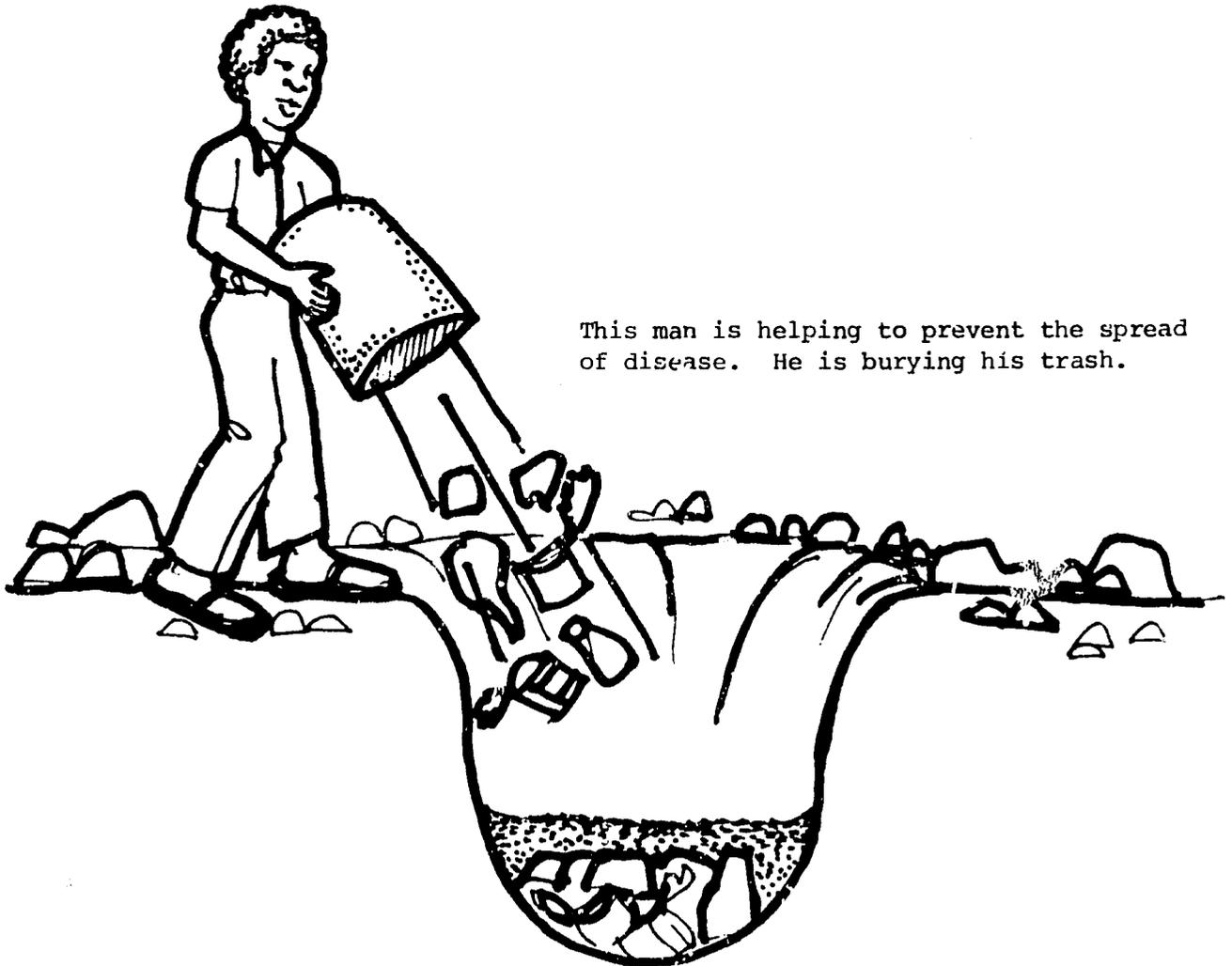
It is very important, then, to throw trash away properly. There are two ways to do so: burning and burying. Burn trash away from houses so as not to cause fire. If the trash is wet or if it is the rainy season, burning is not useful. Burying is more useful.



The rat, like the fly, spreads disease. Keep rats out of your trash.

Your teacher will show you what to do when burying trash. Some important things to remember are listed below:

1. Dig a pit or a ditch. The pit for home use should be 2 feet deep, 1 foot wide, and 2 feet long. Save the soil you dug out as it will be used later.
2. Throw the trash in. Cover it with some soil. A few inches will be fine. Doing so keep away the flies.
3. When the trash is near the top of the pit, press it down hard. Then cover it thoroughly with a lot of soil - anywhere from 1 to 2 feet. This extra soil will help keep rats and other animals from digging into the trash.



This man is helping to prevent the spread of disease. He is burying his trash.

You know that if you do not bury or burn your trash that rats will come to it. Wherever there are rats there are also fleas. Fleas are tiny, brown bugs. Both fleas and rats spread disease, like plague, for example. Since they both are a health problem, it is necessary to protect yourself against both rats and fleas.

Here are some helpful ways to protect yourself against rats and fleas:

1. As you just learned, bury or burn all garbage and trash. Do not leave anything out for rats to come to.
2. Stay away from places inside and outside of the village where there are many rats and fleas.
3. When going near such places, wear clothing to cover the arms and legs.
4. Use a special bug spray that can be put on the skin and clothing. The spray helps keep fleas away.
5. Make all places where you store food and grain safe against rats.
6. When fleas are a big problem, put flea powder into rat holes and along places where rats run.
7. Kill rats with traps. Once the rats are dead they must be buried with the trash.
8. Sometimes it is useful to kill rats with poison. But this should not be done when a disease like plague is present. Why? Because the fleas will carry the poison from the rats to people. This is bad.

FOOD

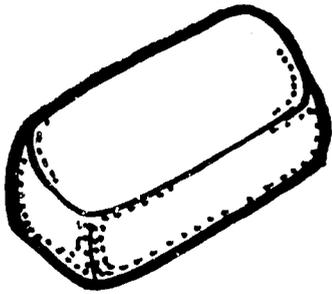
Eating good food every day is necessary in order to be healthy and to stay strong. But sometimes a person can become sick from his food. Why? Because the food became poisoned with disease.

The wise person does not want his family or friends to become sick. He is careful when handling and caring for food. He knows how important it is to do the things in the list below.

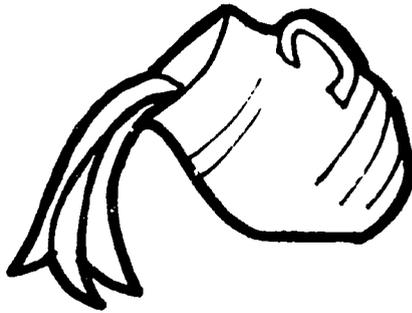
1. Always scrub your hands with soap and water before you start to prepare food. Dirty hands may poison the food.
2. After relieving oneself, always wash your hands with soap and water - especially if you are about to handle food.
3. Do not handle food if you have any open sores on your hands.
4. A sick person should not handle food or prepare it for others to eat.
5. All fruits and vegetables should be washed before they are eaten raw or used in cooking. The water will wash off any worms' eggs, insects, fertilizer, etc.
6. A very good way to make food safe to eat is to cook it well. Thorough cooking will kill anything which may cause illness such as worms and insects. It is very important to thoroughly cook meat.
7. Wash all dishes and utensils with hot, good water. Have them dry in the sun in a rack on top of a table. Store them in a dry place where flies, rats or other things cannot get them.
8. Cover all food, and store it in a clean, dry place out of the sun. Food left in the sun will become bad and make people sick.



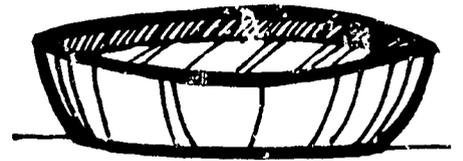
WASH YOUR HANDS OFTEN



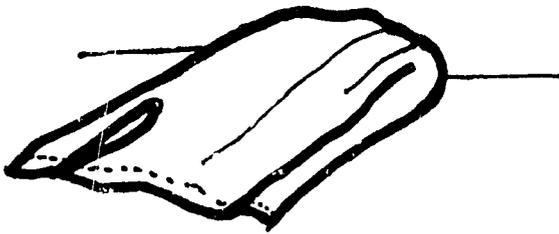
SOAP



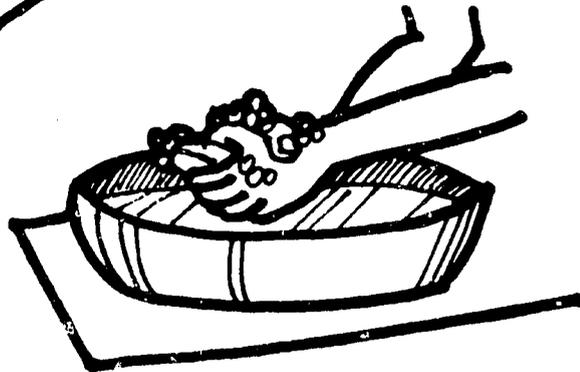
WATER



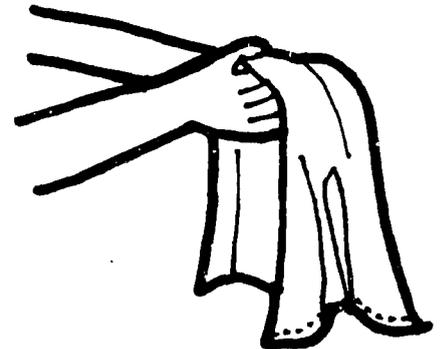
PAN



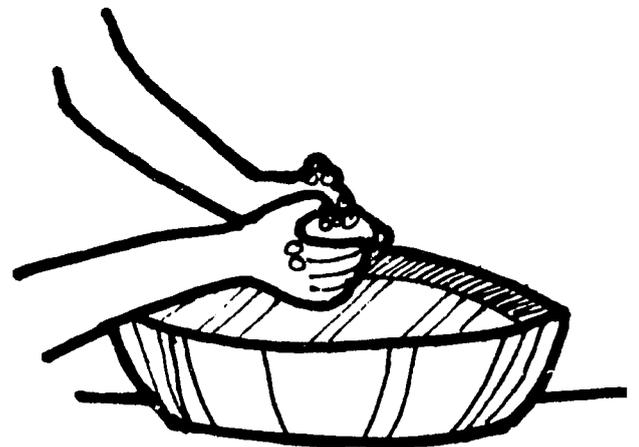
TOWEL



BEFORE PREPARING FOOD



BEFORE EATING



AFTER RELIEVING ONESELF

CONCLUSION

In this unit you learned many health habits:

- *How to make water good to drink, and to use.
- *What to do with human feces.
- *What to do with trash.
- *How to handle food to make it safe to eat.

You must teach your fellow villagers these health habits. Then you must see to it that they practice them. If they want to have good health, they must do everything that is necessary to get it and keep it. For example, when someone plants and raises a crop, he does everything necessary in order to have a harvest. If he doesn't do everything necessary, then he will not have a harvest. So, too, if the villagers do not practice the necessary health habits, they will not have good health.

Here is a summary of good health habits:

1. Build and use latrines.
2. If you cannot use a latrine, do what a cat does. Dig a little hole with your foot. Defecate or urinate into the hole. Cover with dirt by using your foot.
3. Wash hands with soap and water after you relieve yourself.
4. Burn or bury trash.
5. Boil all water. Store in a covered jar.
6. Wash hands before handling food.
7. Wash all fruits and vegetables with good water.
8. Cook food well.
9. Wash dishes in hot, good water, and store in a clean dry place.
10. Cover all food and store it in a clean, dry place - out of the sun.
11. Work with the school teachers. See to it that they have the children practice these health habits at school.

TEACHING THE VILLAGE ABOUT HEALTH

In the units "Keeping Clean" and "Sanitation" you learned what to teach the village and how to make some teaching aids to help you. Throughout this manual you will learn more about what to teach and how to make teaching aids. This unit gives you tips on teaching so that you can effectively use the aids you make to teach what you should.

1. Be on time. If you have planned a 7:30 p.m. meeting, be there at 7:00 o'clock to have everything ready. Don't mistreat your fellow villagers by being late.
2. Be polite. Do not look down on your fellow villagers.
3. Show your eagerness to teach new things which will improve the lives of your fellow villagers.
4. Be clear so you can be easily heard. Do not speak too fast or you will not be understood. Do not talk with your back to the people.
5. Be brief. If you talk too long people will stop listening to you. Then they will not remember what you want to teach them.
6. Be simple. Do not teach too many things at one time.
7. Let the villagers be part of the meeting. Ask them questions. Call on them to give examples of something you are teaching. People feel left out if you only "talk at" them.
8. Use your teaching aids well. Be sure that everyone can see them. Do not confuse people by using too many aids at one time. For example, do not fill a wall with many posters. No one will look at them because the wall of posters is confusing. Use one or two teaching aids at a time. When using a flannelgraph, only put one or two pictures up at a time. Remove them when they are not needed.
9. Introduce your teaching aids. If you are going to show a filmstrip, tell people what they are to see in it. The same thing is true for tape recordings, posters, and other such things.
10. If you are to use a projector or tape recorder, be sure the machine is working. Have the room ready so you can show the filmstrip or play the tape.
11. Be prepared! Never begin teaching without planning exactly what you want to talk about.

FOOD

INTRODUCTION

This is the unit about food. It is a very important unit. There will be many things for you to learn:

1. What kind of food people need and why.
2. What people in the village have special food needs and why.
3. What diseases happen when the right food is not eaten.
4. How to tell if a child is growing properly from the food he eats.
5. What to teach the village about food.

These five points clearly show how important this unit is because, without the right food, people would not be able to grow strong and stay healthy.

THREE FOOD GROUPS

Everyone needs food to grow and stay healthy - not just any food but the right food. And everyone needs the right food in the right amount. This first part of the unit will tell you what the right food in the right amount is.

When a seed is planted, it needs three things to grow: the earth, the sun, and the rain. If there is no rain or sun, the seed will not grow. The seed needs all three things.

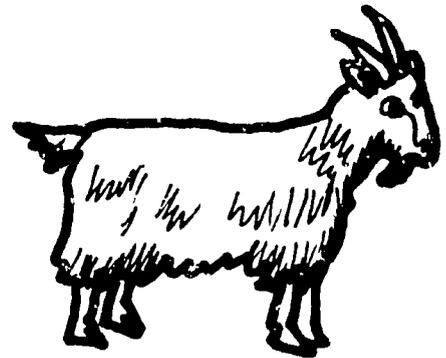
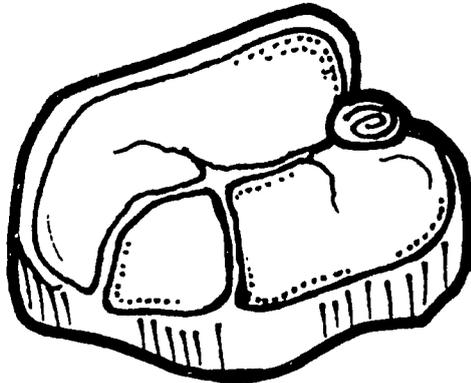
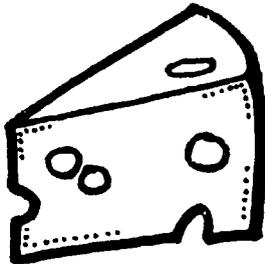
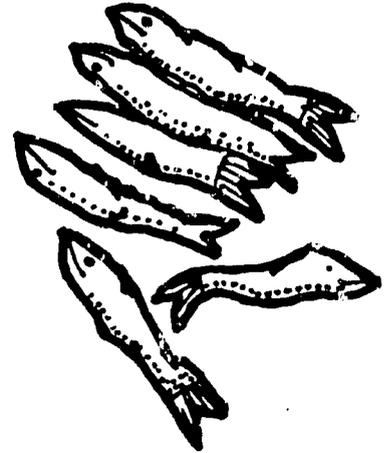
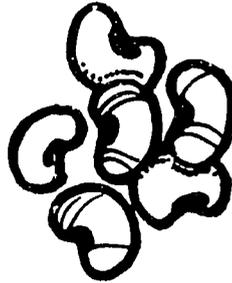
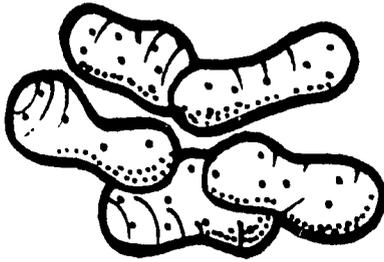
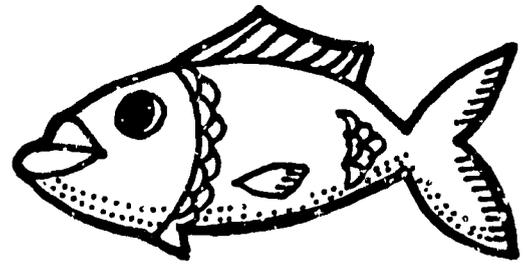
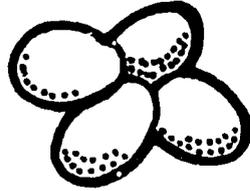
For a person to grow and stay healthy, three things are needed too: body-building foods, energy-making foods, and protection-giving foods. These are the three food groups. If a person only eats food from one or two of the food groups, he will not grow. He needs food from all three groups just as the seed needs three things to grow.

Food from each group is needed for good health because each group does something special inside the body.

What each group does inside the body is listed below:

- | | | |
|-------------------------|---|---|
| Body-building foods | - | Build the body as we grow and make the body strong again after we are sick. |
| Energy-making foods | - | Give us energy to do things and keep the body warm. |
| Protection-giving foods | - | Keep the body from getting some diseases. They also help the other two groups be used properly by the body. |

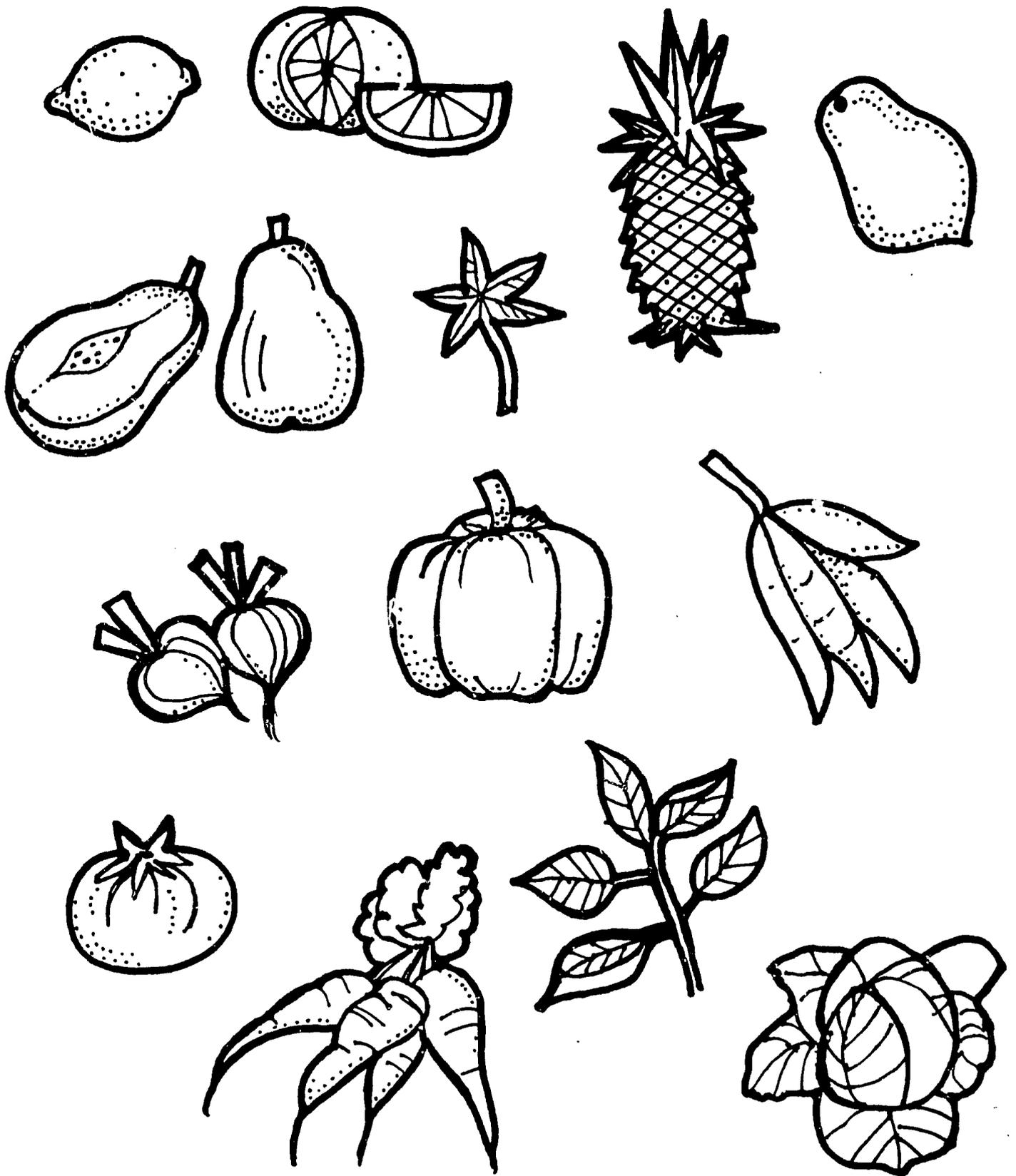
The next three pictures show you what foods belong to each group.



The body-building food group helps keep the body strong and repair the body after it is sick. Who are some of the people who need body-building food? Everyone - including healthy, growing children and adults to stay healthy; pregnant women; nursing mothers to make milk; sick children and adults to repair the harm done by sickness.



The energy-making food group gives you the energy to do your work and all other activities. These foods help the body to move just as fuel helps the car to move.

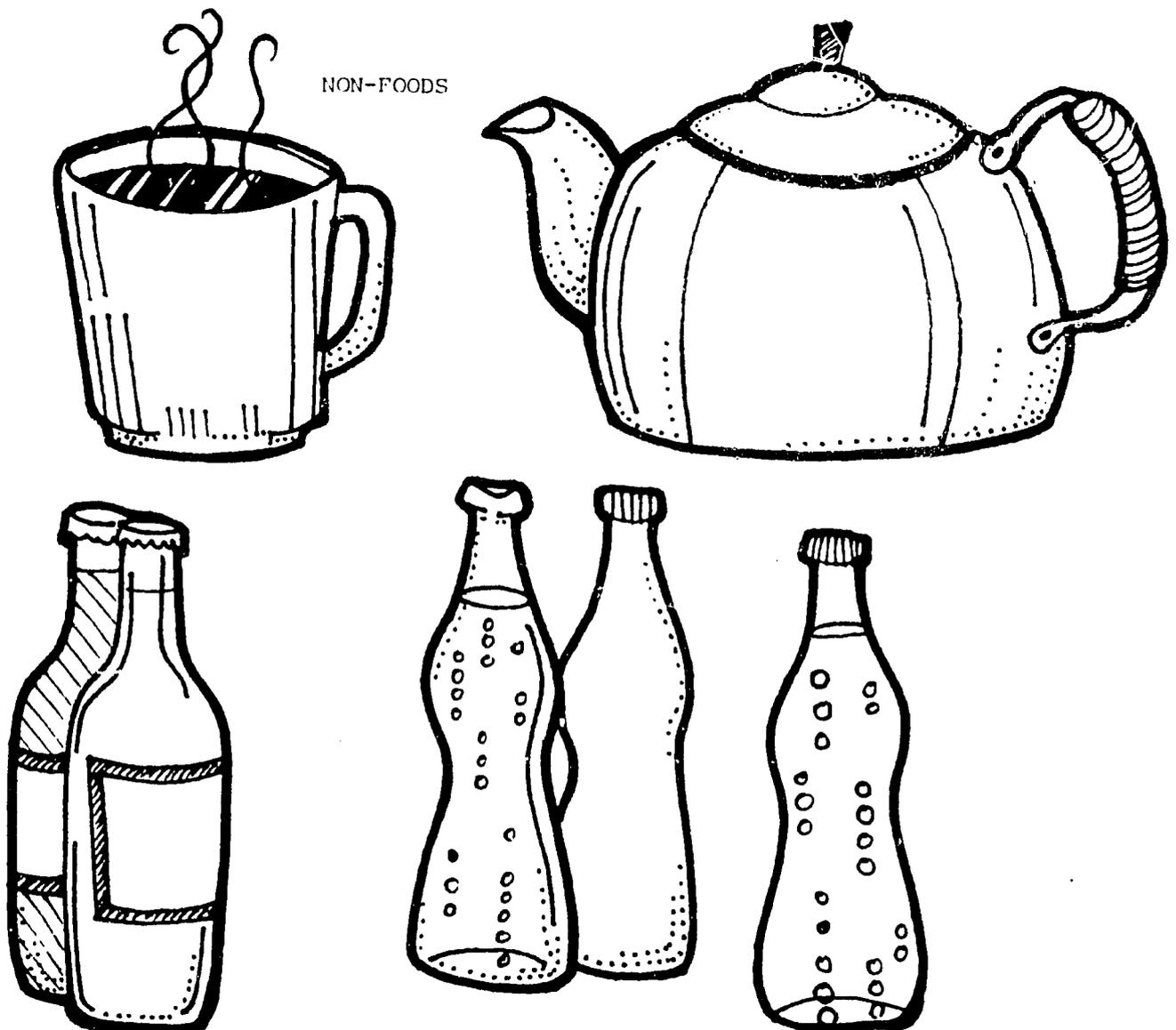


The protection-giving food group guards the body against some diseases - just as the roof on your house protects you from the rain and the cold. These foods help keep the body from becoming sick. They also help the body use the food from the other two food groups.

People ~~do not always eat the food that is good for them.~~ Instead, they use food that does not make the body strong or healthy - food that is not in any of the three food groups. This kind of food is called a "non-food" because ~~it does not have good things in it.~~ Here are some "non-foods":

- *fizzy drinks
- *beer
- *tea
- *coffee

Although they taste good, these non-foods do nothing for good health. They should only be used after a person is sure that he is getting food from all three food groups. Since these non-foods are costly, they should only be bought after the food from three food groups has already been bought.



It is important to know what the three food groups are. However, it is more important to know what foods in and around your village belong to each of the food groups. So, in the space below make a list of local foods for each of the three different food groups. Your teacher will help you.

Body-building foods:

- 1.
- 2.
- 3.
- 4.
- 5.

Energy-making foods:

- 1.
- 2.
- 3.
- 4.
- 5.

Protection-giving foods:

- 1.
- 2.
- 3.
- 4.
- 5.

Now that you know what the right foods are for good health, you must learn what the right amount is. The right amount is a balanced meal. A balanced meal has at least one food from each of the three food groups in it, such as:

1. A body-building food like beans.
2. An energy-making food like corn.
3. A protection-giving food like tomatoes.

Each meal should be a balanced meal. Some food from each group should be eaten at every meal everyday. A person should eat three meals a day, too! This will help you have good health.

What kind of balanced meal would you make? In the space below, prepare three meals. Use local foods from each food group.

Morning Meal:

- 1.
- 2.
- 3.

Afternoon Meal:

- 1.
- 2.
- 3.

Evening Meal:

- 1.
- 2.
- 3.

REMEMBER: The rule of "threes." Three foods - Three food groups - Three meals a day.

THE RULE OF "THREES"

3 FOODS

3 FOOD GROUPS

3 MEALS A DAY

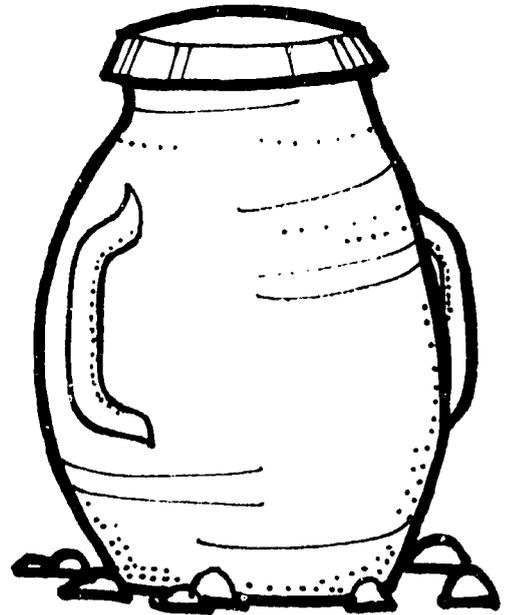
WATER

Besides a balanced meal, water is also important for good health. But the water must be clean and good. Good water cannot have any germs in it. To be sure the water is good, boil it first. Boiling kills the germs or dirt.

To boil water, place the pot of water on the fire and heat it until the water is rapidly bubbling. Take the water off the fire, cover it, and let it cool. Put the cooled water in a clean jar for storage. Cover the jar to keep out dirt and flies. Now you will always have good, clean water to drink and use.



Boil Water



Cover it to keep it clean.

BREAST FEEDING

If health giving food is necessary for the adults and children in the family, it is even more so for the baby. Just as it takes wood or bricks to build a strong house, so it takes special food to build a strong baby. The best food for a baby is breast milk. It has just the right amount of body-building foods, energy-making foods, protection-giving foods, and good water. In other words, it has all the necessary food ingredients that a baby needs.

In addition, there is always plenty of breast milk, and breast milk never goes sour or bad -- even when a mother is pregnant.

A baby should be breast-fed as soon as he is born. Breast feeding alone is all that the baby will need for the first four months of life. At five months well-mashed food from each of the three food groups should be given to the baby along with the breast milk.

When the baby is able, he can begin to eat some solid food from the three food groups along with the breast milk. The baby should be breast-fed as long as possible (18-24 months), but he must also have food from the three groups from five months on.

Here is a chart which shows when to feed what food to the baby:

<u>AGE</u>	<u>FOOD</u>
Birth to 4 months	Breast milk
5 months to 24 months	Breast milk, porridge made with mashed foods from the body-building and protection-giving groups. The child should eat this until he can eat solid food.

Mothers and would-be mothers should be taught the importance of breast feeding. Your task, as health promoter, is to teach the women in your village about it. Below are seven rules of breast feeding which will help you in your task.

1. Breast milk is best.
2. Put a new-born baby to his mother's breast as soon as possible.
3. Start giving a child porridge mixed with mashed body-building and protection-giving foods when he is five months old.
4. By the time a child is six months, he must be eating plenty of porridge with these added foods three times a day.
5. Start the baby on new foods before he has had his breast milk.
6. Breast feed a child as long as possible.
7. Stop breast feeding slowly.

NOTE: If a mother cannot breast feed because of some physical reason, show her how to properly use the spoon and cup method and not a bottle. Your instructor will teach this method in class. However, breast feeding is best, and mothers should be encouraged to breast feed as long as possible.



Breast milk is best!

FEEDING YOUNG CHILDREN

By the time a child is one year old, he is beginning to eat like an adult. However, a young child has special food needs, and so he is different from an adult in the way he is to be fed. In fact, his food needs are very high because he is growing so fast. From birth to one year a child doubles his size. An adult does not do that in one year.

The child needs special attention to be sure he has enough of the right foods. Children cannot tell their needs so the mother has to be extra careful to give special attention.

A young child's body is forming and growing. He must eat at least three times a day to be sure that he will grow up healthy. A young child will get more food to eat if his mother does these things for him. The mother should:

1. Feed the child often -- at least three times a day.
2. Give the child his own plate -- so he can get his share of the food.
3. Be sure that the food is well mixed and that there is one food from each of the three food groups in his share.
4. Wake up a sleeping child so he can eat.

PREGNANT AND NURSING WOMEN

Women who are pregnant and women who are nursing also have special food needs. These women must eat not only for themselves but also for the child in the womb or the child at the breast. In other words, she is eating for two. If she does not eat properly, she will do harm to her baby and to herself.

These women must eat much body-building food. Body-building food is needed to keep the woman strong and to build the baby growing inside. Nursing mothers need body-building food in order to make the milk which feeds their growing children. So pregnant and nursing women must daily eat extra sources of body-building foods, such as fish, beans, and nuts.

A special problem for pregnant women is that if she does not eat properly for herself and the baby inside, she can easily get poor blood. Anemia is a sickness in which the blood is not as healthy as it should be, and so the woman becomes tired, weak, and pale. The pregnant woman must eat dark green vegetables such as leaves. This food will keep her blood strong.

The old saying that "a little food means a little baby" is not true. A pregnant woman must eat three balanced meals like everyone else, but she also needs extra food for the baby. She especially needs extra body-building and protection-giving food. If she does not get enough to eat, she will do great harm to the baby and to herself. REMEMBER: The pregnant woman is not just eating for herself. She is eating for the baby inside her too.



WOMEN THEMSELVES NEED EXTRA
GOOD FOOD WHEN THEY ARE PREGNANT.

CHILDREN

A child who does not eat balanced meals everyday is malnourished. He is not getting the right food. He will first become underweight and then sick. If an underweight child is not treated quickly, he can become very malnourished. A very malnourished child is a child who has one of two diseases: either kwashiorkor or marasmus.

Kwashiorkor is a disease in which a child gets enough to eat, but the food is not from all three food groups. It is only from one or two groups. In other words it is the wrong type. The child is not eating enough body-building food like beans and fish.

A child usually gets kwashiorkor when he is between 18 and 24 months old. This is because he was not given enough body-building foods from 5 months of age onward. By the time he is 18 months old everyone can clearly see how sick he has become. There are some very special signs which clearly point out a child with kwashiorkor:

- *Parts of the body swell, especially the feet, the lower part of the legs, and the stomach, which becomes bloated. It may even make the child look fat.

- *There is a rash which looks like scaly paint that is peeling.

- *The color of the hair gets lighter. The hair also looks a little red. The hair falls out easily.

- *The face looks very, very sad and unhappy.

Kwashiorkor quickly gets worse once these signs are seen and if the disease is not treated the child soon dies.

Some people believe that a fat child is a healthy child. As a result, they mistake a child with the bloated stomach and swollen feet and legs of kwashiorkor as being healthy. Such a mistake is dangerous! There is a simple test to tell if a child is naturally fat or if he has the swelling of kwashiorkor.

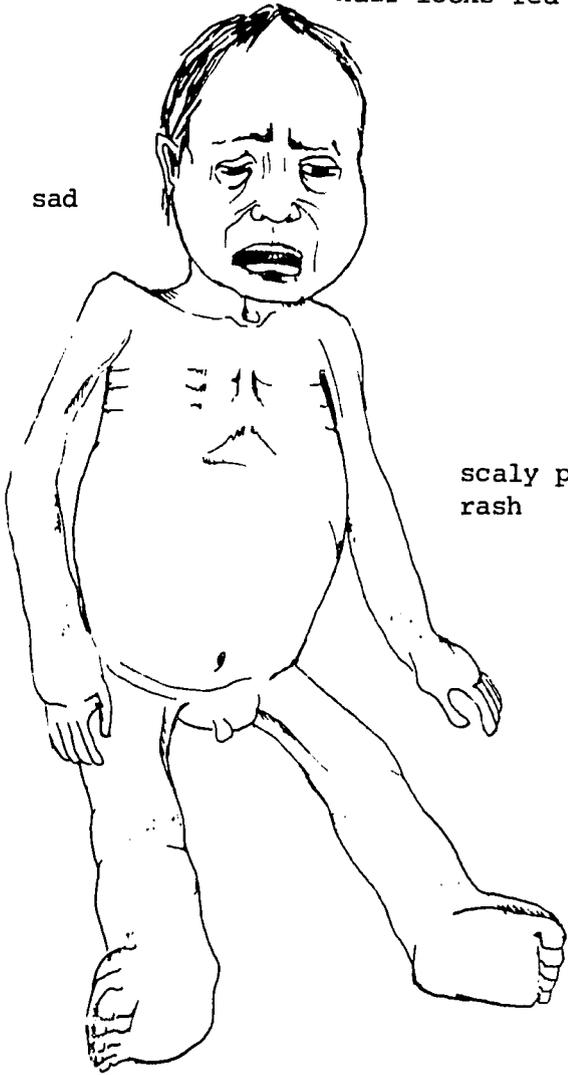
Push in on the leg. If the skin comes back into place right away then the child is healthy. If the skin stays pushed in, then the child most likely has kwashiorkor. He should be treated immediately.

KWASHIORKOR

MARASMUS

hair falls out
hair looks red

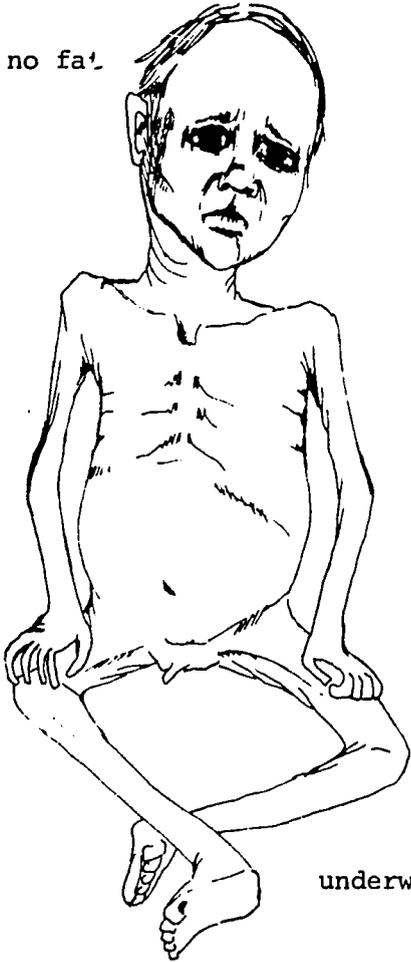
sad



scaly paint
rash

swollen feet
and legs

no fat



underweight

The other disease of malnutrition is marasmus. If a child has marasmus, he is not getting enough food of any kind to eat. This child will not become bloated like the child with kwashiorkor. Rather he will become thinner and thinner. A child usually gets marasmus from too little food from any of the three food groups.

Like kwashiorkor, there are special signs which point out a child with marasmus:

*There is no swelling.

*There is no fat. You can easily see his ribs through his skin.

*His face is thin and looks like an old man's face.

*His head looks big, and his stomach looks swollen because the body is so thin and shrunken.

A child can have marasmus for a long time. The child can get better once you find out he has marasmus and can begin treatment.

If you discover a child with either marasmus or kwashiorkor, you must talk to the parents and explain each disease to them. Point out that bad food habits alone have caused these diseases - not some cultural or religious belief. Make the parents understand that the child is sick from either the wrong kind of food or too little food or both.

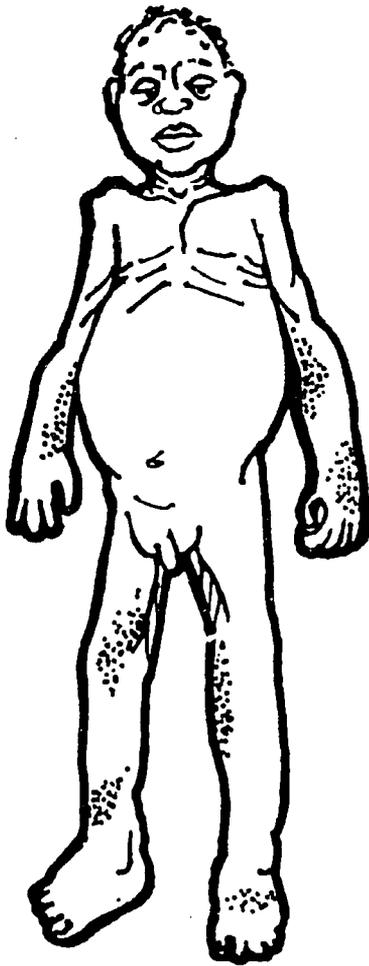
Ask the parents what kind of food the child is eating. If the child is only eating one food, like rice, he must have added to it food from the body-building groups and protection-giving group. Eating three balanced meals a day will help the child get well. If the parents say that they do not have any food from the body-building group, find out what kind of food they do have in the house or what kind they grow. They may not know that something they have is a body-building food.

Here is another example. Family members sell groundnuts at the market but do not keep any for themselves. Tell them to keep a supply for themselves as groundnuts are an excellent body-building food. Find out as much as you can about what

kind of food each family eats and sells. Then tell each family what it can do to have food from each food group at every meal.

After you have taught each family all of these things, tell the parents to immediately take the child to the health post for treatment. The child is too sick for you to treat, as he needs special medication. If the child is not treated, there is the chance that he may die.

Kwashiorkor



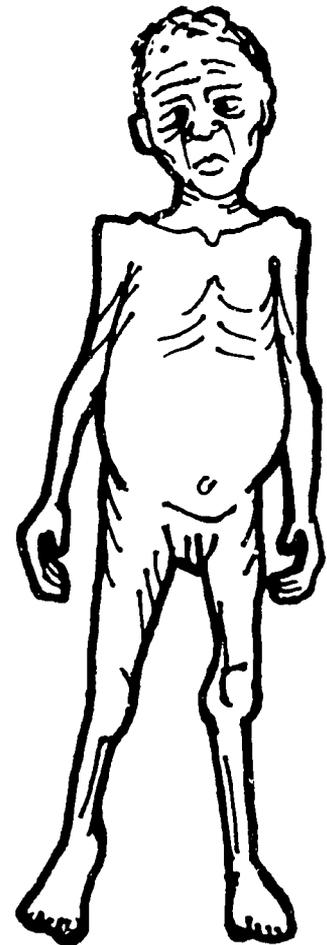
NO

Normal



YES

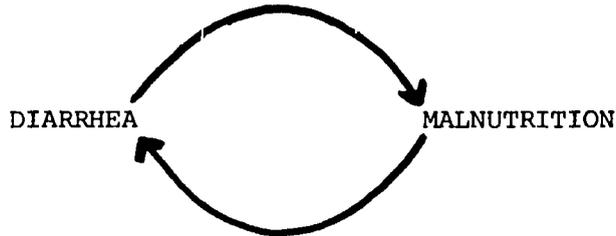
Marasmus



NO

DIARRHEA

Diarrhea is one infection which children usually get and which often kills them. Malnutrition makes the child's body too weak to fight off infections. So he can get diarrhea more easily. Diarrhea causes even more malnutrition. Malnutrition helps to cause diarrhea, and diarrhea helps to cause malnutrition. When two things help to cause one another, we say we have a "vicious circle." This is the "vicious circle" of malnutrition and diarrhea.



As a result, we can see how important it is for children to eat the right food in the right amount. It is like the story of the well-built house. A man knows that a strong, well-built house will stand up to strong winds and will not be blown down. A poorly built house will be too weak against the winds. So too a poorly nourished body will not be able to fight disease. However, a well-nourished body is strong enough to fight most sicknesses.

When a child gets diarrhea, his body loses much water. In fact, he can lose so much water that he begins to dry out. He becomes dehydrated. (See the unit on diarrhea). Certain signs will tell you if a child is dehydrated:

*He is thirsty. His mouth is dry. He cannot get enough to drink.

*His eyes look sunk back in his head.

*The soft spot on the top of an infant's head also sinks.

*The skin loses its elasticity.

This last point is very important and needs to be explained.

Cut a piece of rubber from the innertube of your bicycle tire. Stretch it. Then let it go. It returns immediately to the shape it was before -- it is elastic. The skin of a healthy child is elastic also. If you hold the skin of

his stomach between your finger and thumb, and then let it go, it quickly goes flat again. Dehydration makes the skin dry and less elastic so it sticks up for some seconds before it goes flat.

Here is a test to check the skin's elasticity:

1. Pinch up a fold of skin at the side of a child's stomach.
2. Hold it for a few seconds.
3. Let it go.
4. If you can see the fold you made from the pinch for two seconds, the child is badly dehydrated.

All the water that is lost must be put back. As soon as diarrhea starts, give the child salt-and-sugar water to drink with a clean cup and spoon. This solution can be made by mixing together:

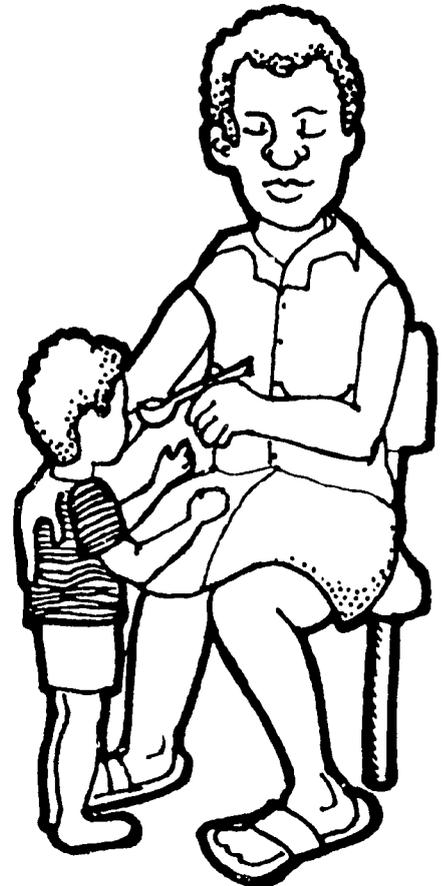
1 cup of good water

1/4 teaspoon of salt (not more!) or a "three-finger pinch"

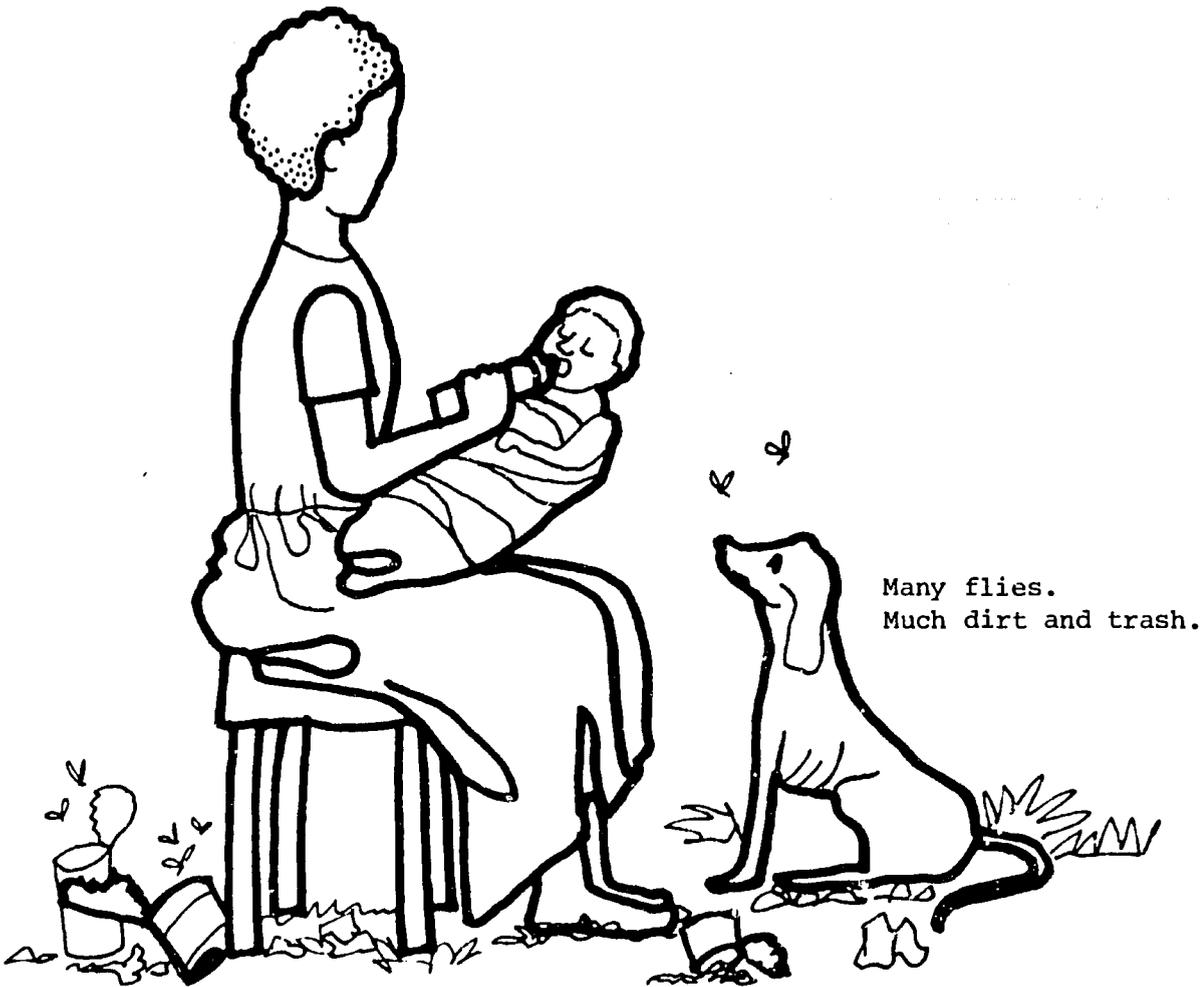
2 teaspoonsful of sugar

The child needs plenty of this solution because it is medicine to make him well. Give it to him at least six times a day. Only then will the child start to get well again.

This child will soon recover from diarrhea. His mother is giving him the salt-and-sugar water with a clean cup and spoon.



BOTTLE FEEDING WILL KILL THIS CHILD!



Bottle feeding causes diarrhea. Why? Because it is hard to keep the bottle clean and away from flies and dirt. Flies and dirt help to cause diarrhea.

DO NOT BOTTLE FEED!

MEASURING GROWTH

Children who are not getting the right food in the right amount are a great concern. They become underweight and malnourished. It is not always easy to tell these children by sight. Have you ever noticed a log floating in the river? It floats in such a way that much of the log is under the water and only a little is above. Malnutrition is similar to this. The little above is like the children who have severe malnutrition: kwashiorkor and marasmus. These children are easily seen--just like the log above the water. However, the many children who are malnourished and underweight are like much of the log which is below the water. These children are hidden in the village, and you must find them.

Members of your village can help you in finding these malnourished children. Another way to find these children is to remember this: if one family member is malnourished, it is likely that other members are too.

This is why measuring growth is so important. In fact, it is the key to finding malnourished children in your village. The arm roundness measurement is one way to measure growth. Not only must you use it, but you must also explain it to the parents. Parents need to understand that good food makes everyone grow strong and healthy. If they know this, parents can make sure that their families have good food to eat.

ARM ROUNDNESS

As the healthy child gets the right food he needs, his arms become bigger and fatter. During the child's first year of life his arms grow quickly. An underweight child does not have fat arms as a healthy child does. Instead, he has thin arms.

The child's arm can be used to tell if the child is growing. You can tell if a child is growing by measuring the roundness of the arm.

To measure the arm roundness, you will use a "quac-stick." A "quac-stick" is a piece of plastic that has part of it marked in a special way. If you look at the picture below, you see that the "quac-stick" has a black tip and is marked with three other colors: red, yellow, and green.



It is easy to use the "quac-stick." Wrap it around the child's left arm halfway between the elbow and the shoulder. The black tip will point to one of the colors. That color tells the health of the child.

If the black tip points to green, the child is healthy. He does not have malnutrition. If the black tip points to red, the child is badly malnourished. If the black tip points to yellow, the child has a mild case of malnutrition. This child could become more malnourished. He must be watched closely so that he does not become worse.

Here is a summary of what the colors on the "quac-stick" mean:

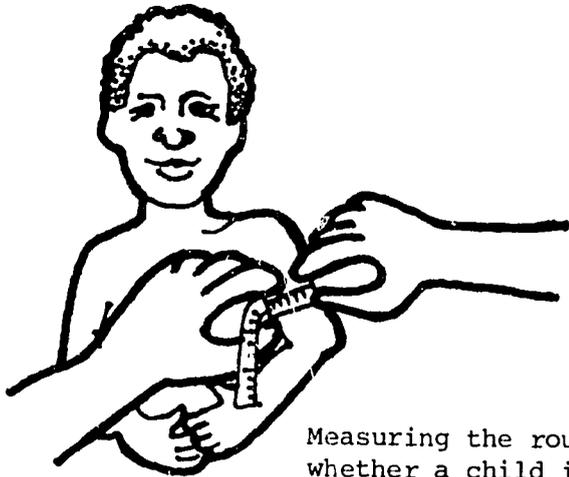
<u>COLOR</u>	<u>MALNUTRITION</u>
Green	No malnutrition; healthy
Yellow	Borderline malnutrition; could become worse.
Red	Serious, dangerous malnutrition.

The "quac-stick" is a useful tool, but it can only be used on children who are one to five years old.

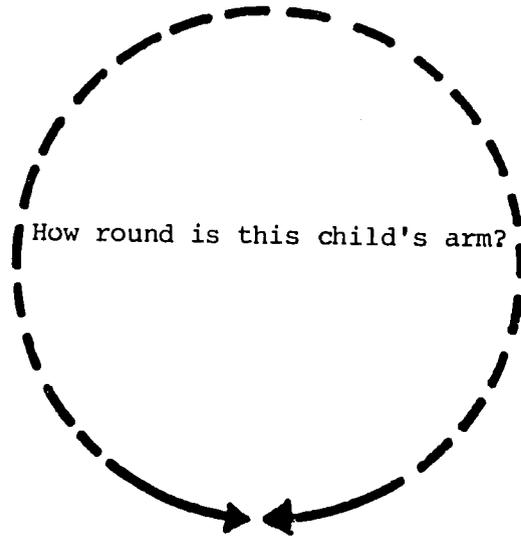
The "quac-stick" is one way to tell if children are growing or not.

Children who are not growing are important for four reasons:

- *They become ill more often and die more easily than healthy children do.
- *They grow up less clever than they should. Clever and skilled people are needed for a country to develop quickly.
- *They do not grow up so tall and strong as they would have if they had been well nourished.
- *They do not grow to be good workers as they are not as strong as others.



Measuring the roundness of the arm tells whether a child is growing or not.



Weight-for-Age Chart

Another way to tell if a child is growing is to weigh the child regularly. The information is then recorded on a weight-for-age chart. Because children of like age should weigh almost the same, we can use this chart to observe the growth of one child and compare it to other children his age.

Let us study this chart and how to use it. Your teacher will help you so that you can use the chart correctly.

Figure #1 and figure #2 show a weight-for-age chart. Figure #1 is the cover, and the information to be recorded there needs no explanation. Figure #2 shows the inside of the chart. The first information to record is the month of the child's birth under the column which shows how old he is.

If the mother does not know in which month her child was born, ask her questions like these: Was the child born during the planting or harvest season? Was it during the big rain? It is especially important in children under one year of age that the month of birth be as exact as possible. So once you have asked these questions, ask more questions such as: Was the child born near the start, in the middle, or at the end of the planting season, the big rain or whatever? Such questions as these will get you the information you need.

If the mother cannot tell you how many years old her child is, ask her questions like these: Was the child born during one of the festivals? If so, which one? Was it during the big flood or at the time of the dry spell? Again ask good questions which will get you the information you need.

Once you have the information, record it. Under the column with the child's age, print the month of birth in all the dark squares on the card. In the other squares, print each month but only when a mother and child come for a visit. See figure #3. It shows that the child was born in March and has come for a visit in April, May, and June. His next visit should be in July.

But the mother and child do not come in July. Instead they come in September. Do not fill in the chart until you see them. Wait for their visit before filling in the chart. Then you will know for sure that the mother did not bring the child for a few months. When a mother does not bring a child to you often enough, you must find out why and get her to bring the child every month - more often if the child is sick.

Each time a child is weighed, the weight is recorded. One reading alone cannot tell much. It is necessary to take a series of readings because, then, you can see if there are any problems.

Place a dot on the chart to show the weight for each month. Then connect the dots. Look at figure #4. The child weighed eight and one half kilograms in May, nine kilograms in June, and nine and one half kilograms in July.

From the time he is born, until he is five years old, the child is to be weighed every month, if possible. Then to be sure the child is always growing, it is important to compare the monthly weights on the child's chart. The child's weight should always be going up on the chart.

Take a look at the weight-for-age charts in figures #5, 6, 7, and 8. The chart in figure #5 shows that the child is growing because he is gaining weight. The weight of the growing child falls within the dark lines on the chart. This area is called the path to health. As he gains weight, the child walks along this path. When he get to the end of the path, the child will find that he has grown up healthy. Being weighed every month will help the child along this path to growth and good health.

Figure #6 shows a child whose weight goes up and down. It also shows that the child has not yet come to the path of health. Even though the child is not weighing as much as he should, the chart shows that the mother is following your advice about feeding the child. See how the weight goes up from July to November.

This gain is a good thing. The child is getting closer to the path to health. Praise the mother for her work. With your praise, the mother will more quickly get her child to the path to health.

Figure #7 shows that the child is not growing because he is not gaining weight. The child in this chart is in danger of dying from malnutrition. He must be given the right kind of food AND the right amount. The child in figure #8 started with poor nutrition, but then began eating properly. He was given the right kind of food in the right amount.

Road to Health Chart

Clinic		Child's no.
Child's name		
Boy/Girl		
Mother's name		Registration No.
Father's name		Registration No.
Date first seen	Birthday-birthweight	
Where the family live: address		

BROTHERS AND SISTERS		
Year of birth	Boy/Girl	Remarks

ANTI-TUBERCULOSIS IMMUNISATION (BCG)
Date of BCG immunisation
.....

SMALLPOX IMMUNISATION
Date of immunisation
Date of scar inspection
Date of reimmunisation

POLIOMYELITIS IMMUNISATION
Date of first immunisation
Date of second immunisation
Date of third immunisation

WHOOPING COUGH, TETANUS & DIPHTHERIA IMMUNISATION
Date of first immunisation
Date of second immunisation
Date of third immunisation

MEASLES IMMUNISATION
Date of immunisation

OTHER IMMUNISATIONS
.....
.....

Reasons for special care

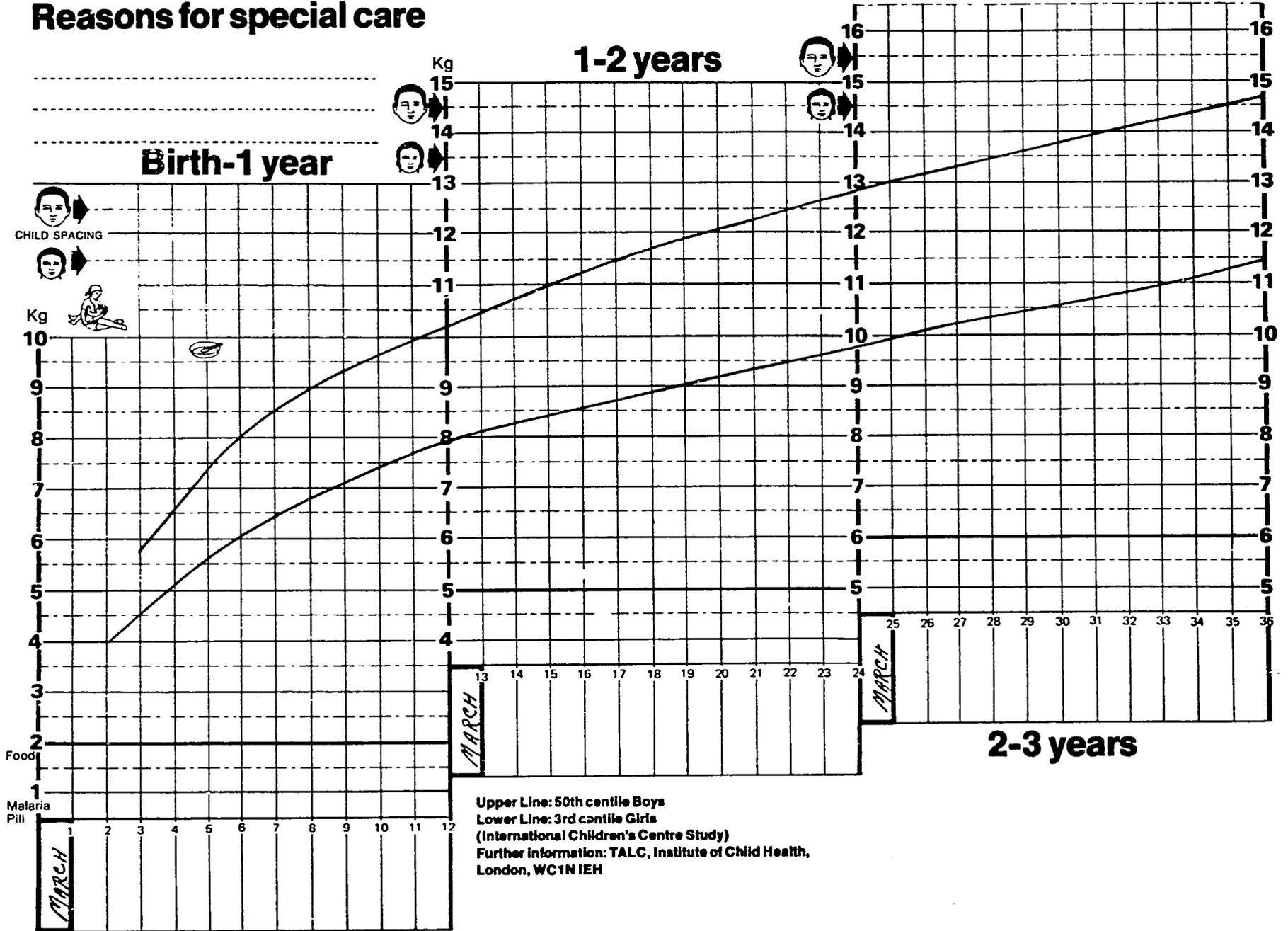


FIGURE #2

Reasons for special care

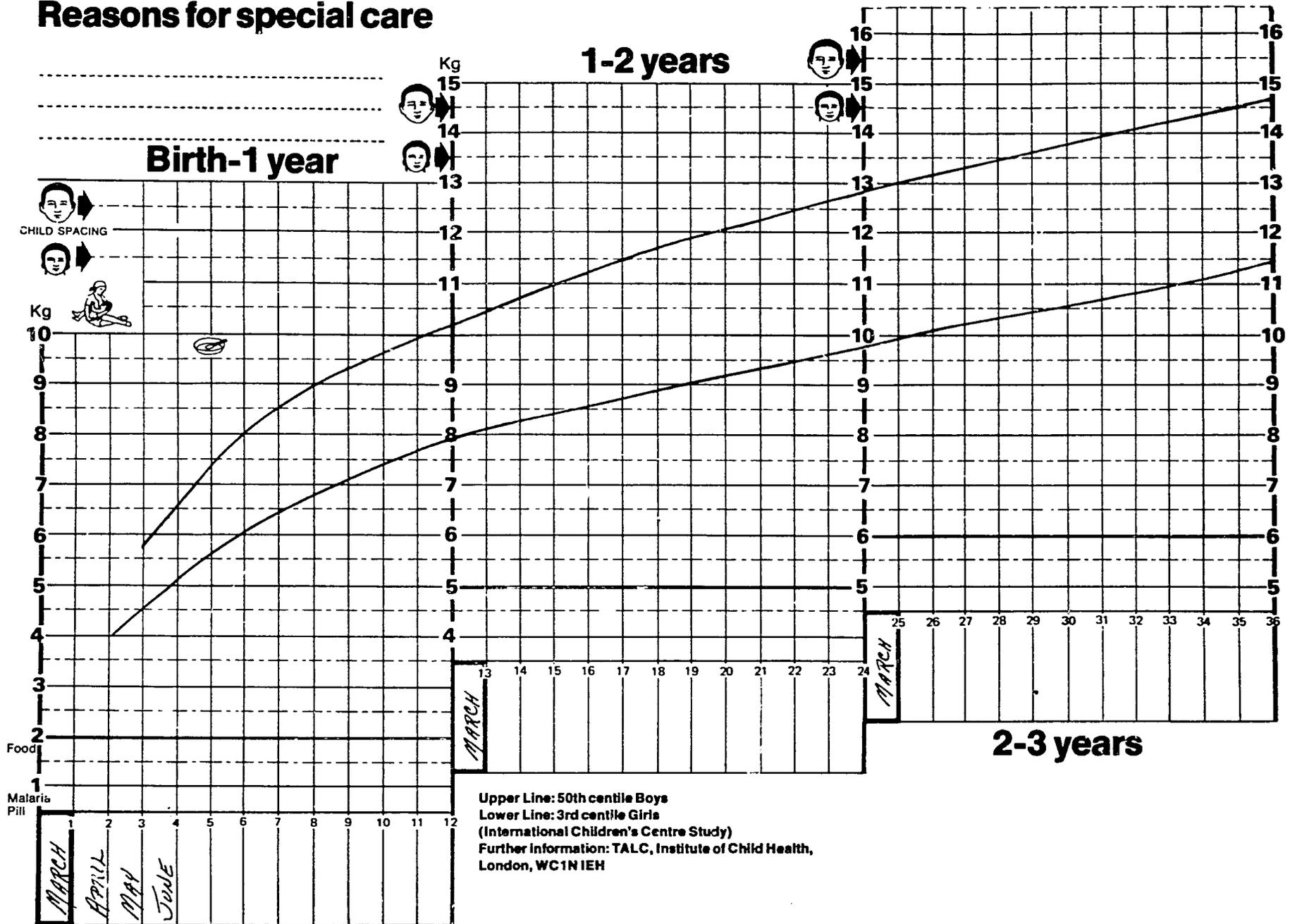


FIGURE #3

Reasons for special care

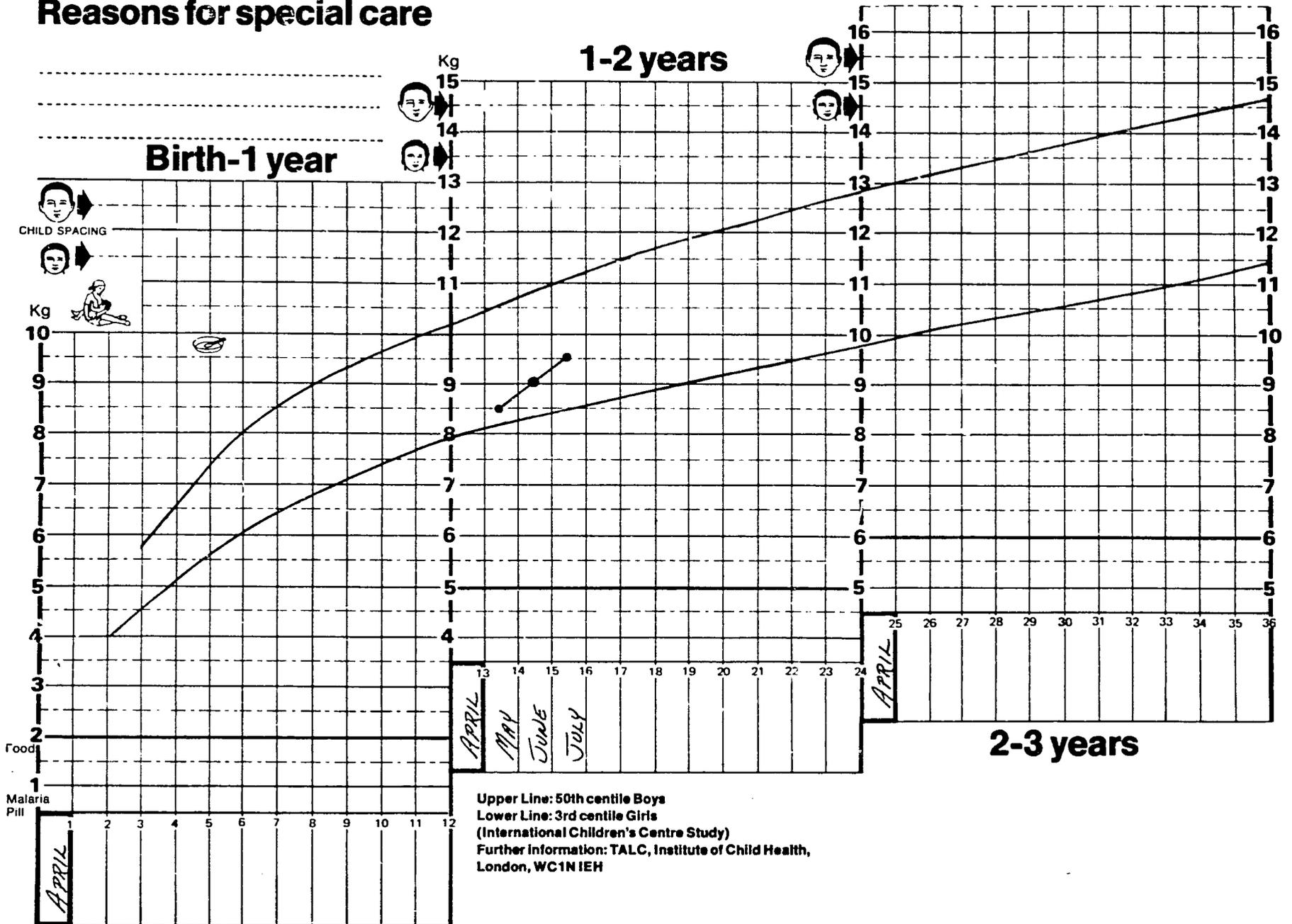
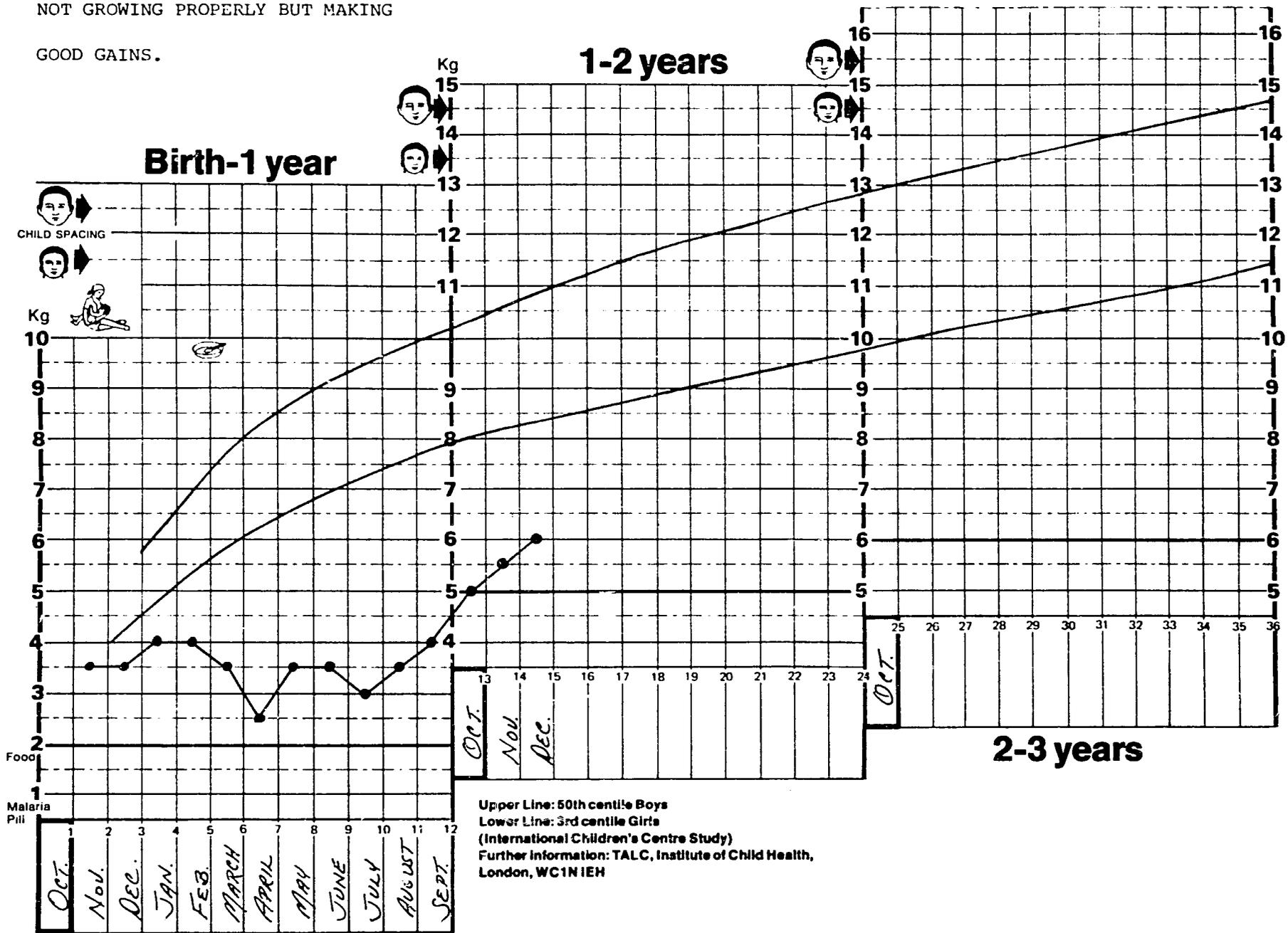


FIGURE #4

SHOWING A CHILD WITH POOR DIET -
 NOT GROWING PROPERLY BUT MAKING
 GOOD GAINS.



08

FIGURE #6

SHOWING A CHILD NOT GROWING
BECAUSE HE IS NOT GAINING WEIGHT.

81

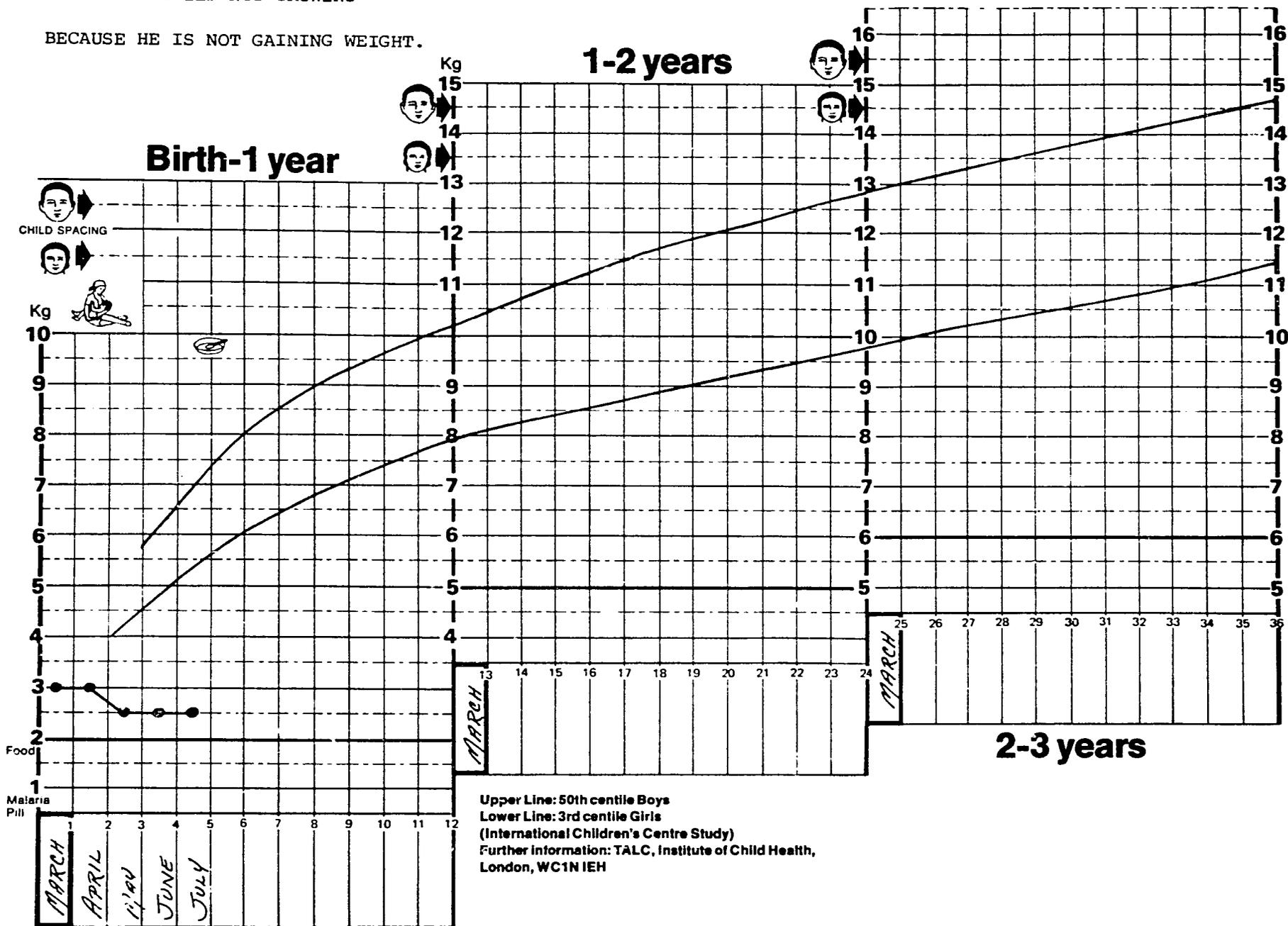


FIGURE #7

SHOWING A CHILD STARTING WITH A
 POOR DIET AND THEN EATING PROPERLY.

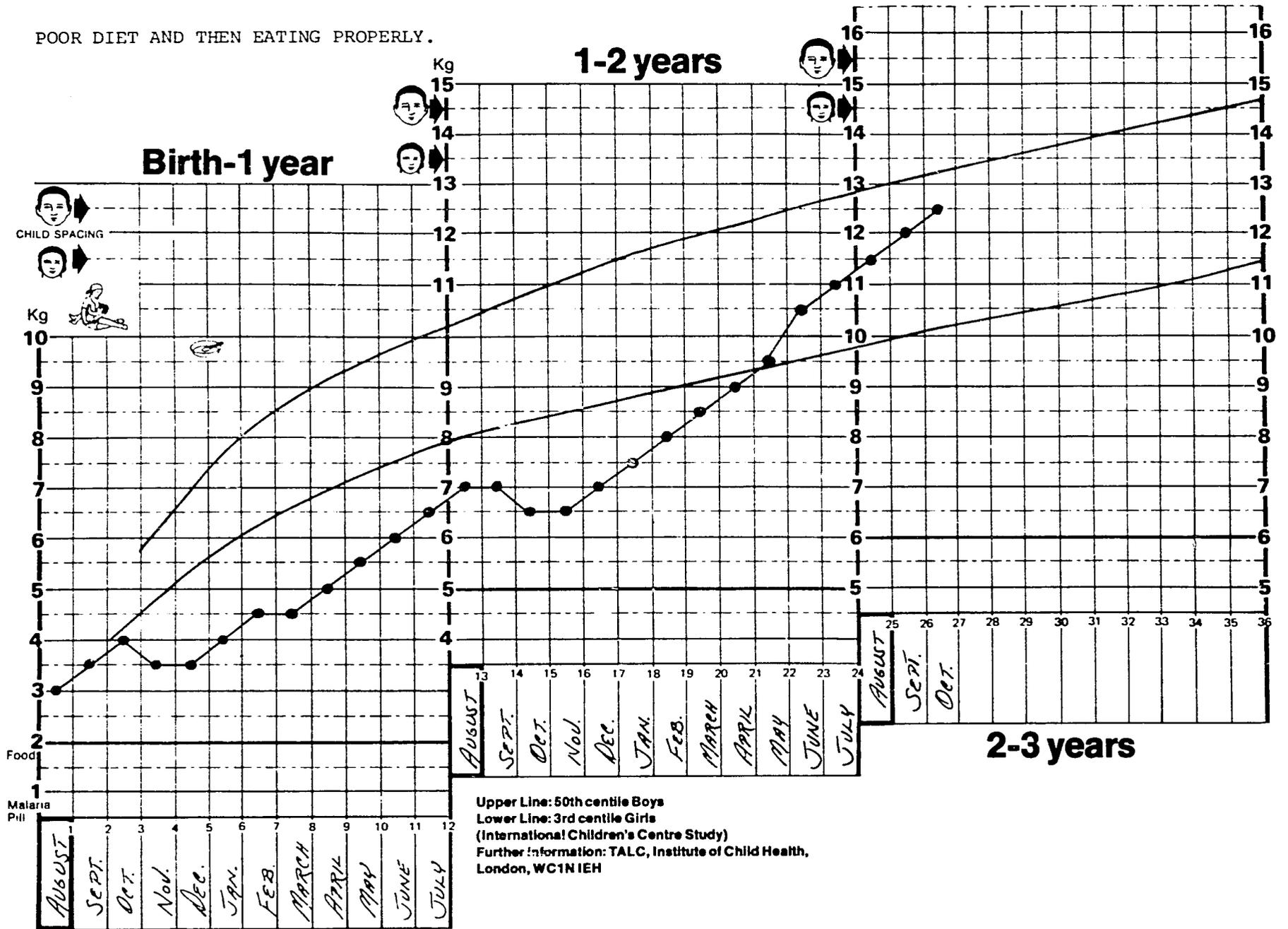
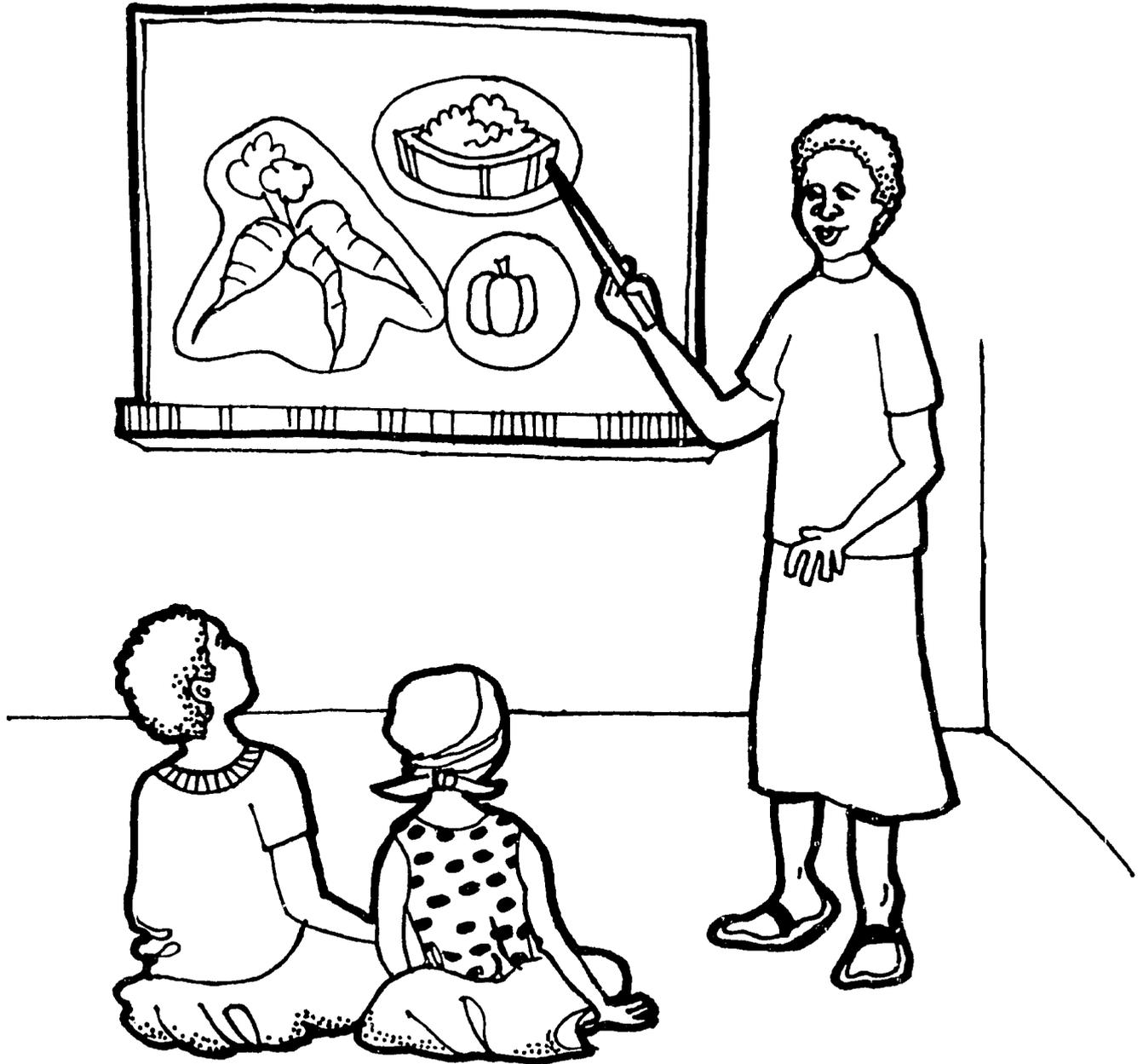


FIGURE #8

TEACHING THE VILLAGE

A big part of the job of the Village Health Promotor is to teach people in the village about better health. Teaching about good food habits is one of your biggest and most important jobs. Here are some ways to teach your fellow villagers about eating better.

1. Show pictures of children with marasmus and kwashiorkor. Tell what the diseases are and why they are dangerous.
2. Collect pictures of local foods. Arrange them into the three different food groups. Take one picture from each group, put them on the flannelgraph to show the idea of a balanced meal. Have mothers choose foods from each group to show what they would put into a balanced meal.
3. Have mothers bring some food to a meeting. Show what would make a balanced meal. Then have them work together, under your direction, to make a balanced meal which everyone at the meeting could eat.
4. Make a poster for each of the seven basic rules of breast feeding.
5. Make a poster for each of the four points for feeding the young child.
6. Make pictures of the ingredients for the salt-and-sugar water. Put on the flannelgraph. Bring in the ingredients themselves and prepare the solution. Have mothers practice making the solution.
7. Show quac-sticks and weight-for-age charts. Tell why they are used and how they are used.



This Village Health Promoter is using a flannelgraph to teach mothers the importance of eating the right food - especially when they are pregnant.

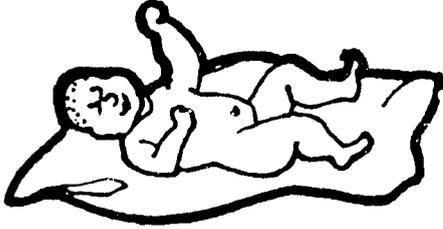
CONCLUSION

Everyone, but especially children and pregnant and nursing women, needs the right food in the right amount everyday. Only when people eat balanced meals can they grow up or stay strong and healthy. Then their bodies can fight off illnesses like diarrhea.

Good food habits should always be practiced. To be sure a baby will be healthy, the mother should breast feed from the baby's birth until the baby is two years old. Some mothers do not practice good food habits and so there are many malnourished children - some with cases of kwashiorkor or marasmus. To find these children, you must regularly measure the roundness of their arms. Then you will know whether they are growing or not. If they are not growing, they are most likely malnourished. They need attention.

Everyone must practice good food habits. Then the whole village will be healthy, strong, and productive. Eating the right food in the right amount everyday is for everyone: babies, children, pregnant and nursing women, and the rest of the people in the village.

BIRTH



ONE YEAR



TWO YEARS

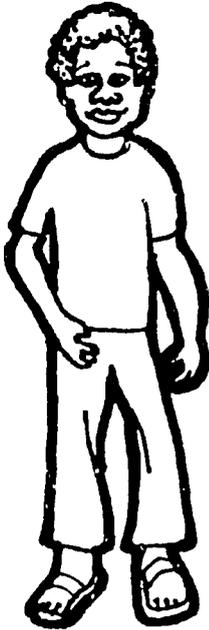


ADULT MAN

FIFTEEN YEARS



FIVE YEARS



This man has grown into a healthy adult. This can happen to anyone if the person eats food from each of the three food groups three times a day.

INTRODUCTION TO HEALTH PROBLEMS

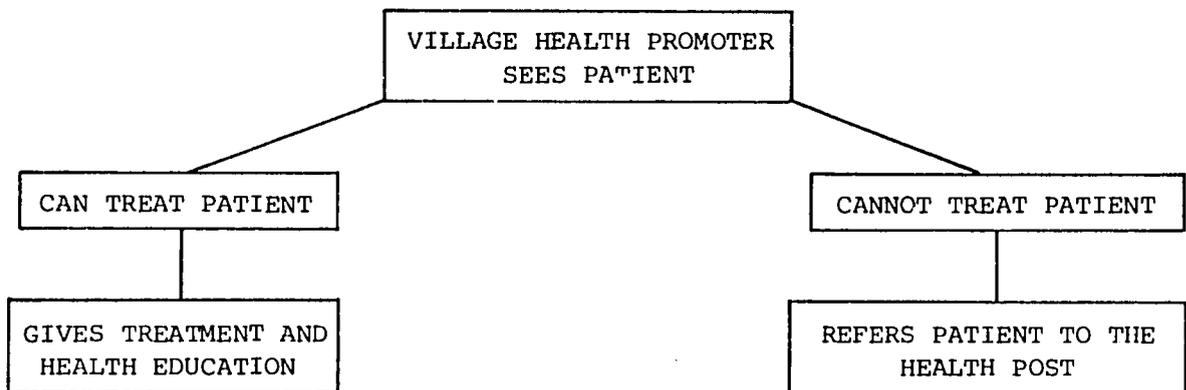
This part of your training manual will introduce you to the health problems you will be able to treat. Before you begin to study them, we want to tell you how this part of the book is put together.

Each section about a health problem has at least four parts to it:

1. What is the health problem.
2. What are its signs.
3. How to treat it.
4. How to prevent it from happening again.

There are questions in each section. These are the kind of questions to ask patients about their problems. Then you can better understand their problem before you treat it.

There is also a summary page which tells you step-by-step how to treat each problem. Here is how a summary page looks. It shows what the Village Health Promoter does.



DIARRHEA

WHAT IS DIARRHEA?

How many times have you heard someone say, "See that child. He is passing much water. He is becoming thin. He must have diarrhea." What is diarrhea that it can cause such things to happen? This unit will answer this question. This unit will also tell you things to teach the villagers so that they can prevent diarrhea or, at least, keep it from becoming serious.

Diarrhea is a very common health problem. A person has diarrhea when he often passes loose, water feces and/or much water. He will do this many, many times a day.

Many things can cause diarrhea. Two things which cause diarrhea most often are bad food and bad drinking water. One way for the food and water to become bad is from the fly. Where do you usually see flies? On dirty things like feces. When a fly lands on feces or dirt, it picks up pieces on its hair. Then the fly lands on your food or water and moves its legs. The pieces of dirt or feces fall off the fly's hairs and onto your food or water. As a result, the food or water becomes bad. The dirt and feces which the fly leaves behind are full of germs which cause diarrhea.

You would not eat dirt or feces because you know that they are bad and would make you sick. So you should also not eat food or drink water that is bad.



Bad food and bad water causes diarrhea the most.

WHO CAN GET DIARRHEA?

Anyone can have diarrhea, but it is very common in infants and young children. In fact, diarrhea is often the cause of the death of an infant or child. There are three reasons why this is so:

*A child more than adult is likely to become sick since the child's body is not yet strong enough to defend itself very well against sickness.

*Because a child is small, to lose just a little water from his body is dangerous. If you have much money, you are not hurt if you lose a little, However, if you have only a little money and then lose some, it is very bad. So it is very bad for a child to lose water from his body.

*A child may have other problems that make diarrhea worse - problems like malnutrition, worms, etc.

Diarrhea, then, is a common health problem, especially among infants and children. When someone has diarrhea, he will pass loose, water feces and/or much water many times a day.

TWO TYPES OF DIARRHEA

There are two types of diarrhoea that you will see. The one is more serious than the other. We will talk about these two types of diarrhoea as Type I and Type II. Type I diarrhoea is diarrhoea that you can treat. Type II diarrhoea is diarrhoea that you cannot treat. Instead you send the patient to the health post.

Type I Diarrhoea

In Type I diarrhoea, the patient will feel weak. There will be pains in his stomach. He will pass watery feces many times a day - from three to twenty times a day. Sometimes the patient only passes water.

A person with diarrhoea can lose too much water - water that is necessary for life. When a person loses too much water, he starts to become dry and wrinkled. He is said to be dehydrated. It is dangerous to be dehydrated because a person can die from not enough water in his body. In fact, dehydration is the most common cause of death when someone has diarrhoea.

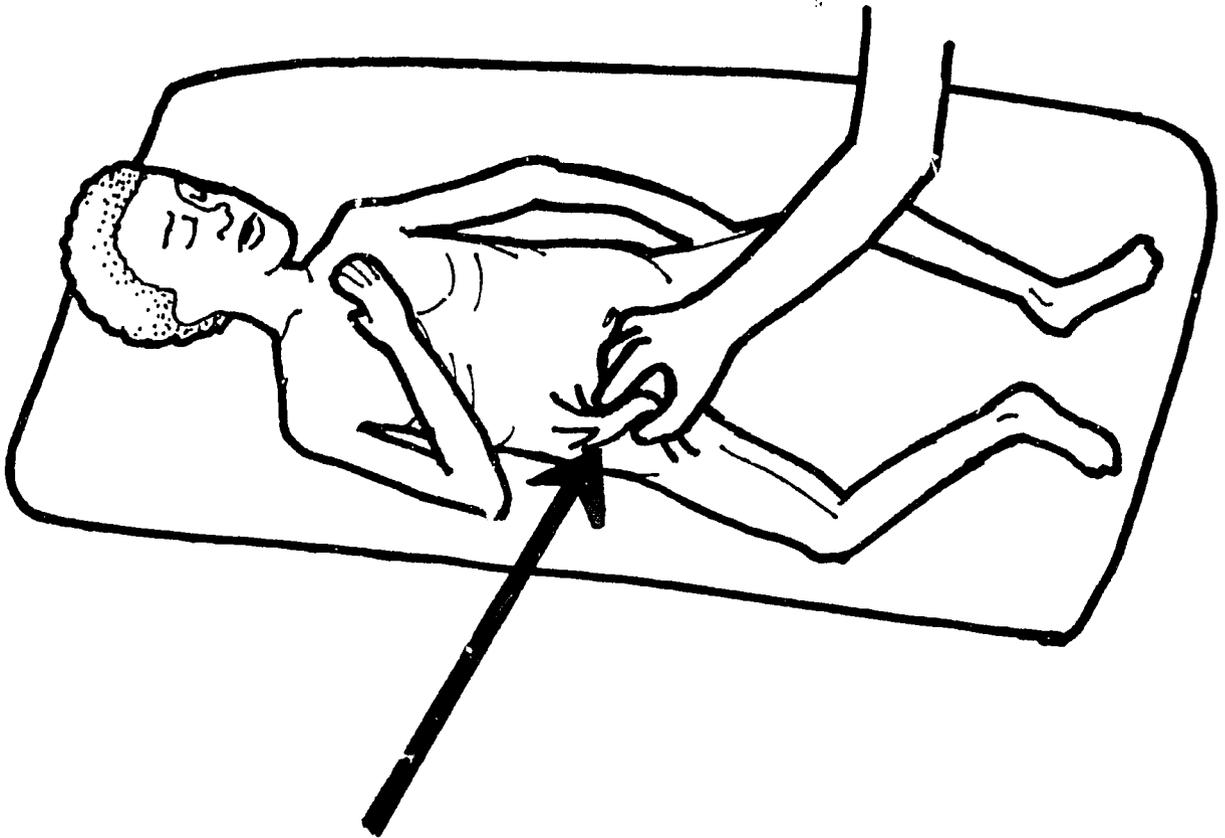
It is very important, then, to know if someone is becoming dehydrated from diarrhoea. Here are some signs to look for:

- *The person is thirsty; he cannot get enough to drink. His mouth is dry.
- *As a body loses water, the eyes become dry and look as if they are sunk back in the head.
- *The soft spot on the top of an infant's head also sinks.
- *The skin loses its elasticity.

This last point is very important and needs to be explained. Cut a piece of rubber from the innertube of your bicycle tire. Stretch it. Then let it go. It returns immediately to the shape it was before -- it is elastic. The skin of a healthy child is elastic also. If you hold the skin of his belly between your finger and thumb, and then let it go, it quickly goes flat again. Dehydration makes the skin dry and less elastic, so it sticks up for some seconds before it goes flat.

Here is a test to check the skin's elasticity:

1. Pinch up a fold of skin at the side of a child's belly;
2. Hold it for a few seconds;
3. Let it go;
4. If you can see the fold you made from the pinch for two seconds, the child is badly dehydrated.



The skin of this child is being tested for dehydration.

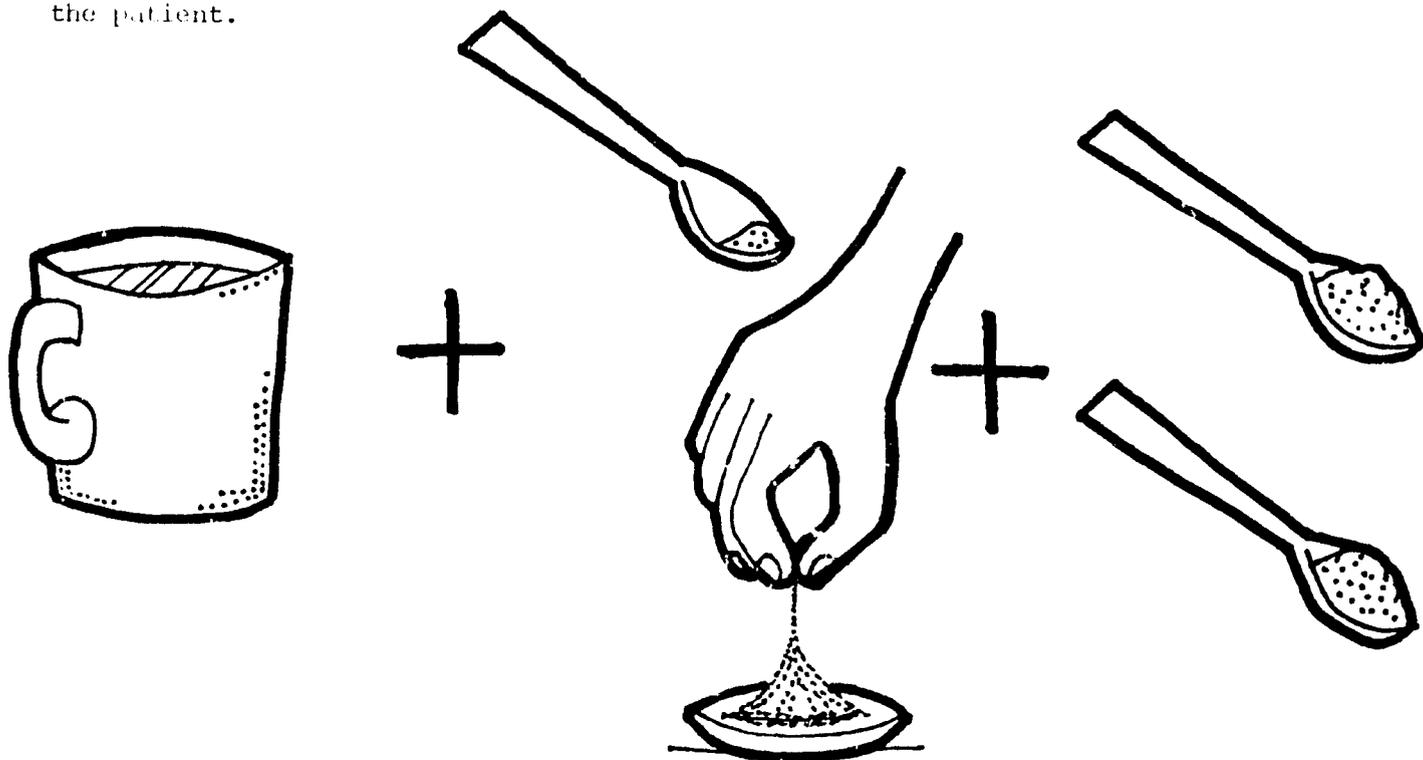
Treating Type I Diarrhea

When someone is passing loose, watery feces and is showing any of the signs of dehydration, then you must give the treatment - a solution of salt and sugar-water. This treatment puts back all the water that the body loses.

The solution is simple to make. It is something which the mothers can easily make and use at home AFTER you have taught them how to make it. The solution is a mixture of the following:

- 1 cup of good clean water
- 1/4 teaspoon of salt (not more) or a "three-finger" pinch
- 2 teaspoonsful of sugar

If the water has not already been boiled, it should be boiled first. Then add the salt and sugar. Be sure that the mixture is cool before giving it to the patient.



Have the patients, especially children, drink as much as possible of the solution. Children should drink the solution at least six times a day in addition to their other food and drink. The diarrhea solution is medicine and must be given as such.

Very strongly tell the mothers that they cannot give too much of the solution to their children. Giving too little is bad. The children must have the solution or they will not get well.

If the children will not drink the solution, the mothers must try again and again to get the children to drink the solution. Tell the mothers to give the solution at the very first signs of diarrhea. Also tell the mothers to continue to breast-feed as any liquid is helpful. Tell the mothers, too, to continue to feed their children. They should not stop feeding them.

Often a mother will not give a child liquids when the child has diarrhea. She sees that everything the child takes in goes out very quickly. So she does not want to give the child anything to drink. She must, however, because if a child loses too much water during diarrhea, he could become "empty" and then die.

Let us look at an example. A jar of water has a hole at the bottom. The water leaks out. To keep the jar from becoming empty, more water must be added. To stop the leak the hole must be sealed.

This is like the child with diarrhea. To keep the child from losing water, more water and other liquids must be given to the child. To stop the child from losing water, the diarrhea must be stopped. The salt-sugar solution helps to stop the diarrhea. The solution helps to keep the water inside the body so that it will not come out.

If the patient is not given the salt-sugar solution for the type of diarrhea you can treat, then he quickly will develop the type of diarrhea that you cannot treat. So tell patients - again and again - to drink the solution as soon as diarrhea starts.

Have the mothers give the solution for two days. At that time check the patient. If the diarrhea is still present, refer the patient to the health post.

Type II Diarrhea

Type II diarrhea is much more serious than Type I diarrhea. The person with Type II diarrhea has more serious signs. You must look for these signs. If any of the serious signs of Type II diarrhea are present, then you must refer the patient to the health post for treatment.

Here is a list of these signs:

1. The patient is very badly dehydrated.
2. The patient vomits.
3. The patient passes watery feces many more times a day - more than twenty times a day.
4. There is blood and/or pus in the feces.
5. The watery feces that are passed look like rice water.
6. Along with a fever, the patient has the chills.
7. The patient is badly malnourished.

The patient can have one or more of these serious signs to have Type II diarrhea. If a patient has Type II diarrhea, he cannot drink the salt-sugar solution. It will not stop the diarrhea. Instead, a patient with Type II diarrhea must be referred to the health post immediately.

DO NOT GIVE SALT-SUGAR SOLUTION TO A CHILD WITH TYPE II DIARRHEA

WHAT TO TEACH THE VILLAGE

Here is a list of things to teach your fellow villagers. These things will do one of two things:

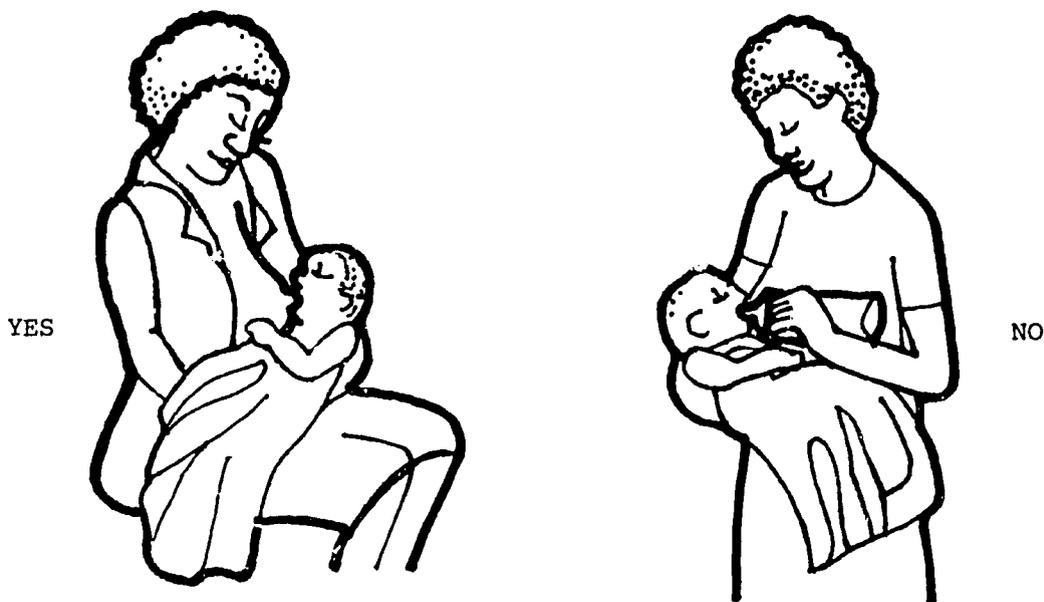
1. Prevent diarrhea from happening.
2. Keep any case of diarrhea from becoming more serious.

Have the villagers practice these things so that they can have better health.

*Teach mothers how to make and use the salt-sugar solution. Tell them to give it as soon as diarrhea starts.

*Remind mothers that children cannot always say that they are thirsty and so do not get enough to drink. Therefore, mothers should give the salt-sugar solution and other liquids at least six times a day.

*Get the mothers to breast-feed not to bottle-feed. They must continue to breast-feed even when the child has diarrhea. Remember: breast milk is the best milk!



*Tell people that diarrhea makes malnutrition worse and vice-versa. Therefore, people should both eat and drink when they have diarrhea. Some people believe that it is harmful to feed anyone who has diarrhea. Such a belief is wrong. Teach villagers that good food and good things to drink help to keep diarrhea from becoming worse.

Teach villagers these habits:

*Use latrines to keep flies away from feces.

*Wash hands after relieving themselves and before handling food.

*Keep dirt out of fingernails. Keep them short and clean.

*Cover food and water to keep away flies and dirt.

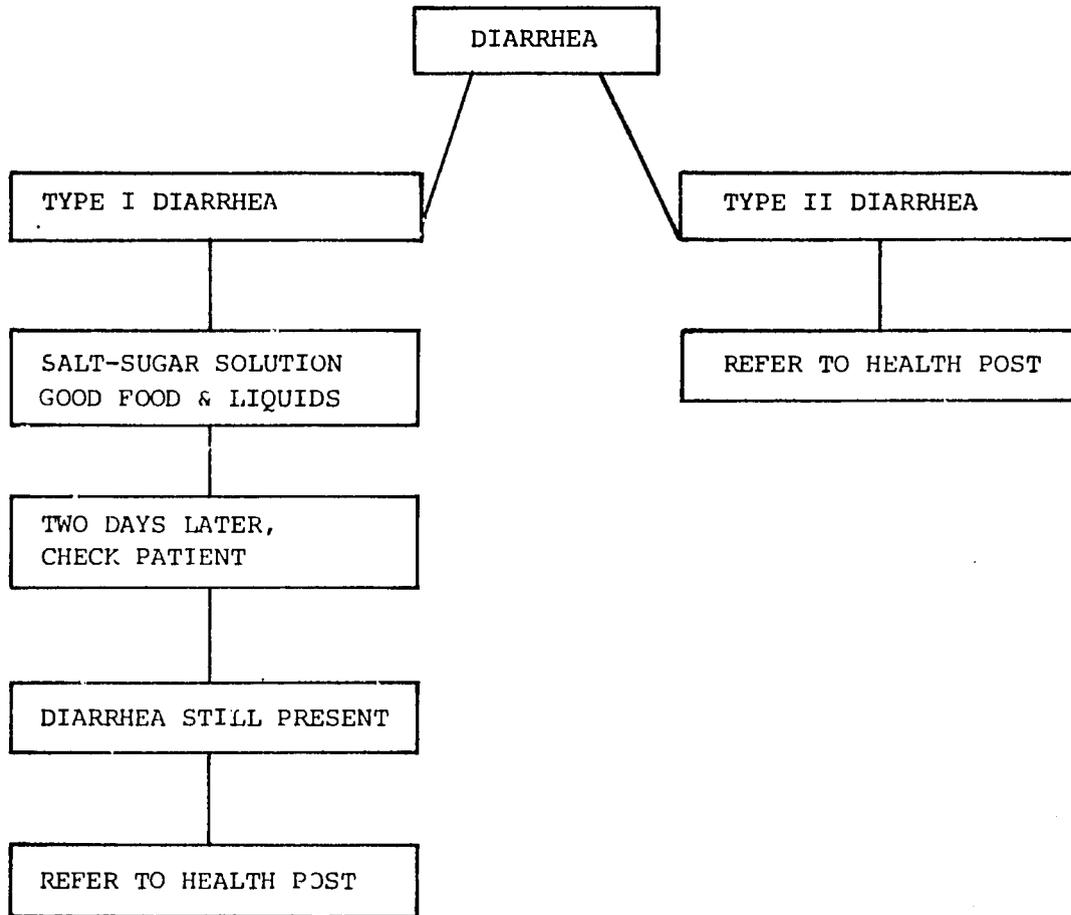
*Wash and store dishes, utensils, etc.

*Drink and use good clean water. Boil water first, if necessary.

*Children should not eat the dirt they play in because it can have germs which will cause sickness.



Here is a summary of what to do to treat diarrhea.



FEVER

INTRODUCTION

Have you ever touched the face of someone who is sick and felt how warm it was? Have you ever been so sick that you felt on fire? Yes? Then you have felt fever.

Fever is not an illness itself. Rather it is a very common sign of an illness. Everyone's body is warm. This is normal. But if the body becomes hot, the person has a fever. The fever is a sign which tells that the body is sick. If the body is to become well, the fever must be treated.

Before learning how to treat a fever, you need to know how to tell if a person has a fever.

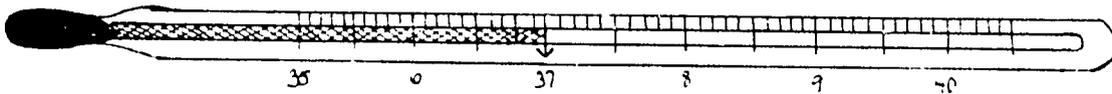
FEVER IS A SIGN OF ILLNESS

THE THERMOMETER

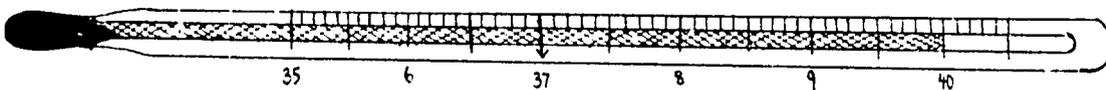
1. HOW A THERMOMETER WORKS

In order to tell if a person has a fever, you must take his temperature. To take a person's temperature, you use something called a thermometer. It measures how much heat the body has just as the seller measures how much flour or rice you buy in the market.

A thermometer is made of glass and has a shiny silver tip. On the inside of the glass there is a liquid. On the outside there are numbers. Some numbers are blue, and some are red. These numbers tell you the temperature.



When you use a thermometer on a patient, the liquid inside the glass moves. The number at which the liquid stops is the temperature. If the number is blue, the patient has no fever. If the number is red, then the patient has a fever.



2. WHERE TO USE A THERMOMETER.

Now that you know what a thermometer looks like and how it works, the next thing to learn is where to use one. You can use a thermometer to take a temperature in one of three places on the body:

- *in the mouth.
- *in the rectum.
- *under the armpit.

How do you know which part of the body to use? This chart shows you:

<u>AGE</u>	<u>BODY PART</u>
Birth - 5 years	rectum or armpit
5 years - adult	mouth or armpit

It is best to use the rectum for patients under 5 years of age and to use the mouth for those 5 years and older. Only use the armpit when you cannot use the mouth or rectum.

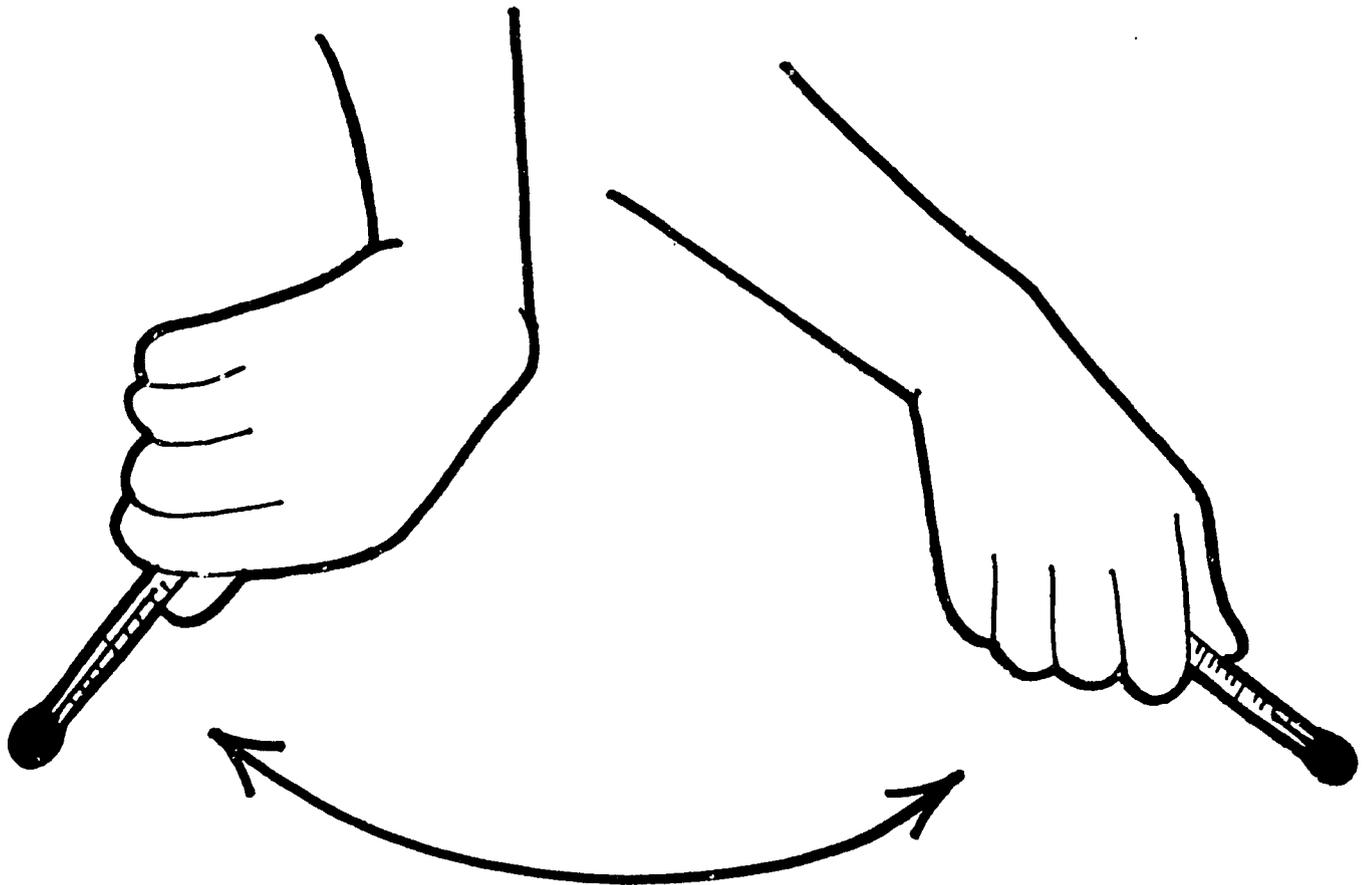
When can you not use the mouth or the rectum? Here is the answer: Never put a thermometer in the mouth or in the rectum of someone if there is a chance that the thermometer might break. Someone, for example, who cannot keep his mouth closed. Someone so upset who might move quickly and break the thermometer. You also must never put a thermometer into the mouth of a small child.

3. HOW TO TAKE A TEMPERATURE

Now that you know where on the body to use a thermometer, you can learn how to take a temperature.

First of all, take a clean thermometer. Be sure that it is clean. In this way, you will not spread illness from one person to another.

Next, wipe the thermometer off with clean gauze. Then hold it firmly between your thumb and first two fingers. Shake it quickly downwards several times so that the liquid goes down below the blue #35. Be careful not to let the thermometer hit against anything which will cause it to break. Handle the thermometer with care. The picture shows you how to shake down a thermometer.



Now you are ready to take a temperature in either the mouth, rectum or armpit.

Mouth (5 years to adult)

Put the thermometer gently in the mouth under the tongue. Tell the patient to close his mouth carefully, not to bite the thermometer, and not to talk. (Ask the patient to hold it in place with his tongue.) Leave the thermometer in his mouth for three minutes. Take it out and wipe it with gauze, then read it.



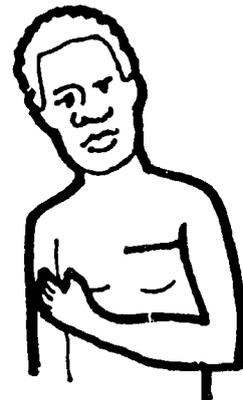
Rectum (Birth to 5 years)

Place the child lying down on his side or stomach. Try to use a chair or the mother's lap. Put a little vaseline on the end of the thermometer. Then gently put it a little way into the rectum and have someone hold onto it. Leave it in place for two minutes. Take it out and wipe it with gauze. Then read it.



Armpit (Birth to adult)

Dry the armpit with a towel and place the end of the thermometer in the armpit. Place the patient's arm across his chest and have someone hold the arm in this position. Leave it there for five minutes, take it out, wipe it with gauze, and read it.



4. WHAT TO DO IF THE THERMOMETER BREAKS

Sometimes a patient moves quickly or suddenly while the thermometer is in his mouth or in his rectum. This can cause the thermometer to break. When the thermometer breaks, the liquid inside becomes bad and dangerous.

IF THE THERMOMETER BREAKS IN A PATIENT'S MOUTH

1. Tell him not to swallow it.
Tell the patient to spit out the liquid.
2. So the patient can wash out his mouth with water, give him a glass of water. Then have him spit the water out.

IF THE PATIENT SWALLOWS SOME OF THE LIQUID

1. Make the person vomit by sticking your finger down his throat.
2. Refer him to the health post immediately.

IF THE THERMOMETER BREAKS IN A PATIENT'S RECTUM

1. Gently - so as not to cut the patient - wipe the patient's rectum of any liquid from the thermometer.
2. Use the tweezers in your bag to very carefully and gently remove all glass inside the patient's rectum. DO NOT CUT THE PATIENT.

5. HOW TO CARE FOR A THERMOMETER

The thermometer needs special care after you use it. After use, wash it with soap and cool, safe water. Hot water makes the thermometer break. NEVER use hot water to clean it.

Dry the thermometer, and put it in a safe place so that it will not break or get dirty. Use the special box in your bag.

TREATING FEVER

Now that you know how to use a thermometer to tell if someone has a fever, you can learn how to treat the fever.

Fever is not an illness. It is a sign of illness. The only way to know for sure if a person has a fever is to use the thermometer. So always use the thermometer to take the temperature of all patients you see.

Here is a list of things you are to do:

1. Take the temperature, and write down whether the number is red or blue.

REMEMBER: A red number tells a fever and a blue number does not.

2. Have the patient take aspirin:

a) Adults: 2 tablets every four hours.

b) Children: 1 tablet every four hours.
(5-12 years)

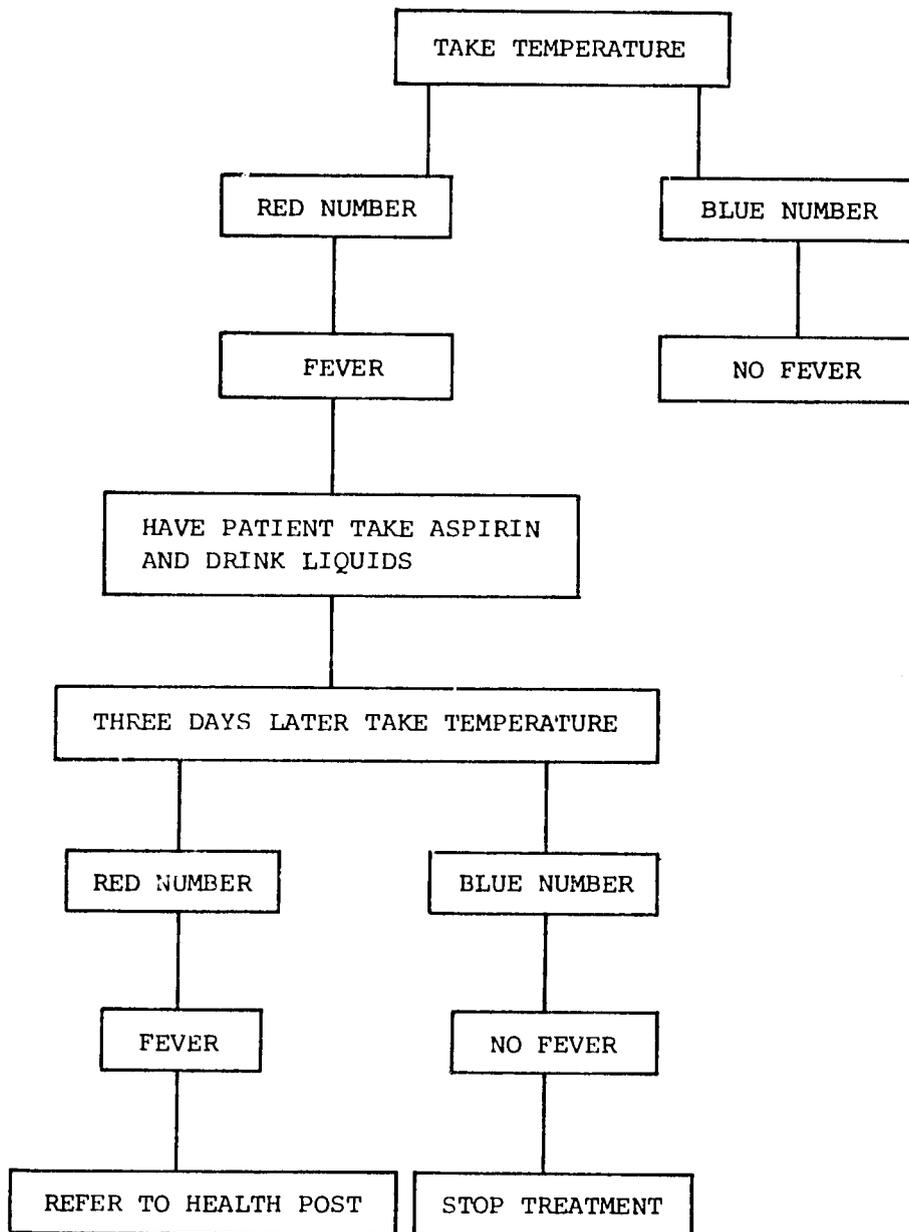
c) Young Children: 1/2 tablet every four hours.
(2-5 years)

d) Infants (less than 2 years of age): 1/4 tablet every four hours.

If your patient does not understand "every four hours", have him take the aspirin around his daily activities. Perhaps he could take it at every meal and when he goes to sleep. Perhaps he could take it in the morning, early afternoon, late afternoon, and evening. Tell the patient to drink one full glass of safe water when he takes the aspirin.

3. Make the patient drink much liquid, such as more safe water. It is very important for the patient to drink liquids. The liquids help to make the fever go down. He must understand how important it is to drink the liquids. Be sure to tell him. In addition to the water the patient drinks when he takes the aspirin, tell the patient to drink four more glasses of water during the day.
4. Check the patient at the same time in three days.
5. Take the temperature again. Write down the color of the number.
6. If the temperature is a red number, the patient still has a fever. Send the patient to the health post.
7. If the temperature is now a blue number, the patient has no more fever. Stop the treatment.

Here is a summary of what to do when treating fever:



COLD

WHAT A COLL IS

Someone coughs and sneezes. His nose drips. His body aches. These are some of the things that happen to a person when he has a cold.

The cold is a common illness of the nose and throat. Even though it is not always serious, a cold does make a person weak. When a person is weak, it is possible for the person to become very sick. If a person is strong, he won't get sick. Think of it this way. A weak house cannot stand up - even in a small storm. A strong house can. Even in a big storm a strong house is not hurt very much.

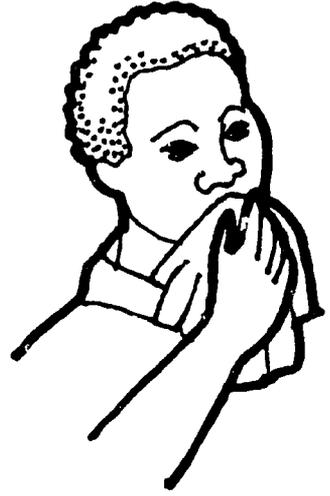
A weak person always becomes sick. However, a strong person can stand up to illnesses and does not always become sick.

This is one reason why it is important for people to come to you when they first become sick. Then you can treat them before they become very sick. Tell your fellow villagers of this again and again. They will then understand and do what is important.

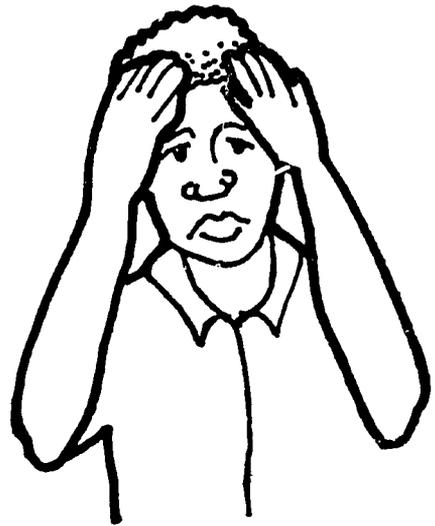
To know if a person has a cold, check for the signs in this list:

- *The patient's throat hurts.
- *His nose drips.
- *He cannot easily breathe through his nose.
- *He coughs.
- *He sneezes - sometimes.
- *His body aches.
- *He has headaches.
- *He feels weak and has no energy.
- *He has a fever. (Remember: you are to take the temperature of all persons you see.)

If a person has these signs, then he has a cold.



SIGNS OF A COLD



HOW TO TREAT THE COLD

Once you know that a person has a cold, you must treat the cold. The treatment you will give is like the treatment for fever. But there is a difference. There is more medicine to give.

Here is a list of things to do:

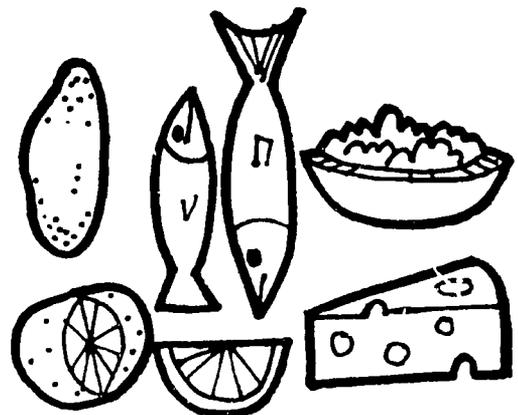
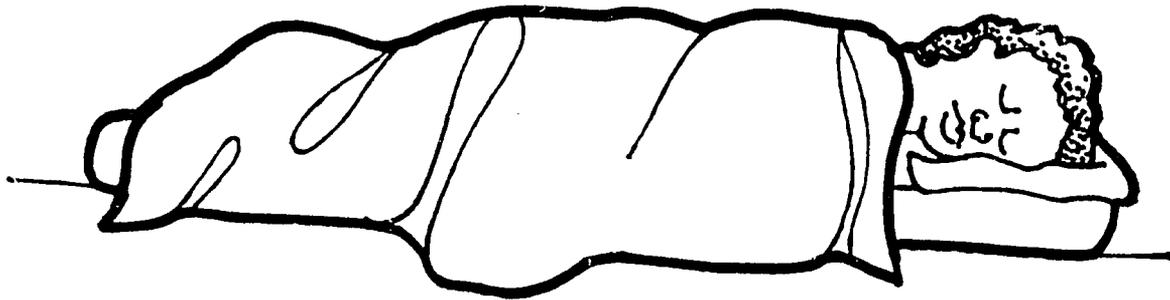
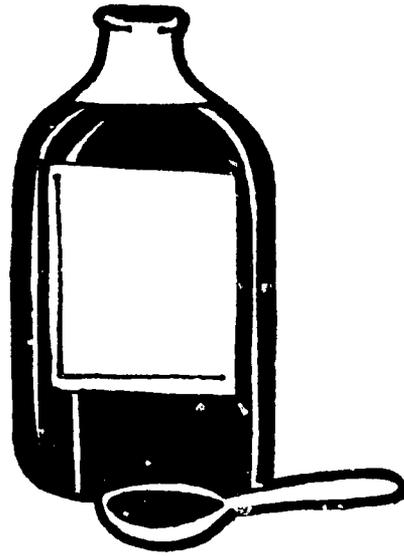
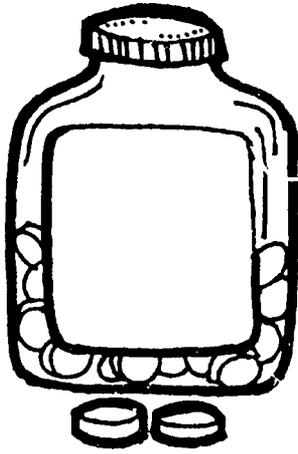
1. Have the patient take aspirin:
 - a. Adults (12 years and older): 2 tablets every four hours.
 - b. Children (5-12 years): 1 tablet every four hours.
 - c. Young Children (2-5 years): 1/2 tablet every four hours.
 - d. Infants (less than 2 years): 1/4 tablet every four hours.

If your patient does not understand "every four hours," have him take the aspirin around his daily activities. Perhaps he could take it at each of the three meals and when he goes to sleep. Perhaps he could take it in the morning, early afternoon, late afternoon, and evening. Tell the patient to drink one full glass of good water when he takes the aspirin.

2. Make the patient drink much liquid, such as good water. It is very important for the patient to drink liquids. The liquids help to make the fever go down. He must understand how important it is to drink the liquids. Be sure to tell him. In addition to the water the patient drinks when he takes the aspirin, tell the patient to drink four more glasses of water during the day.
3. Have the patient take cough syrup:
 - a. Adults (12 and older): 1-2 teaspoons every four hours.
 - b. Children (1-12 years): 1/2-1 teaspoon every four hours.
4. Have the patient mix two teaspoons of salt into a glass of good water. Then have him gargle every two to four hours to make the throat feel better.
5. Have the patient take some medicine to make his nose breathe better. It is the cold medicine for the nose in your medical bag.
 - a. Adults (12 years and older): 2 tablets every four hours.
 - b. Children (1-12 years): 1 tablet every four hours.
6. Tell the patient to get much rest. He will feel tired and needs rest. Rest is necessary if the patient is to become well. Tell the patient to stop his everyday activities - such as working in the fields. Parents should keep their children at home where they can be quiet and rest.

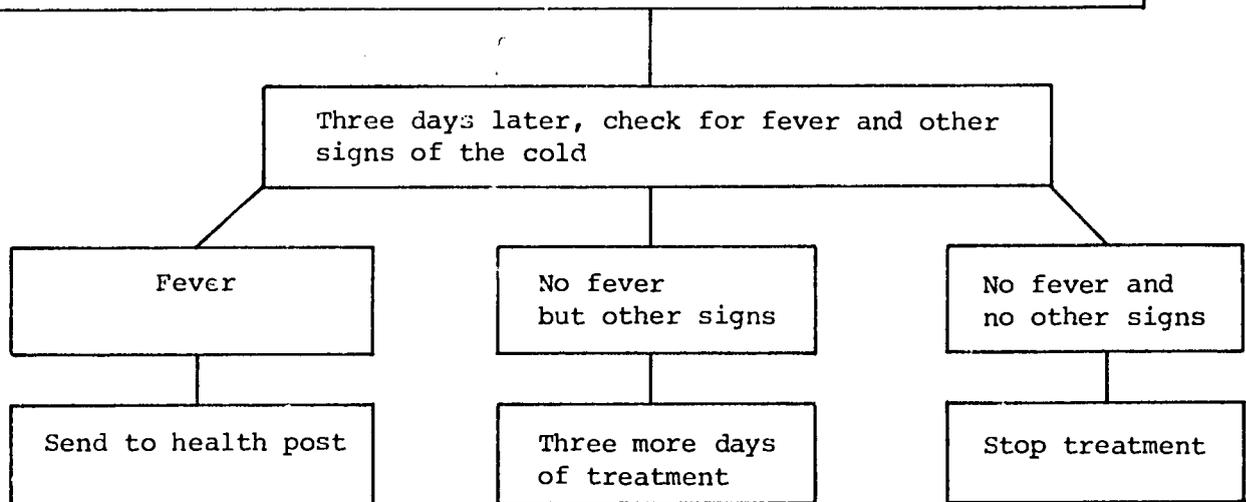
They should not play or go to school.

- a. So their own children can become well.
 - b. So other children do not get the cold.
7. Tell the patient to eat much good food, even if he may not be hungry. Eating good food makes the body strong so it can fight the cold. If he does not eat good food, his body will become weak and he will become very sick. Sometimes, however, there is a belief that certain foods, like fish, are not to be eaten when a person is sick. Tell the patient that such a custom will not let him have good health. He needs good food to have good health.
8. Check the patient at the same time in three days.
9. Take his temperature and see if he still has some or all of the other signs of the cold.
- a. If he still has a fever, send the patient to the health post.
 - b. If he has no fever but still has some of the other signs and symptoms, keep the patient on the treatment for three more days.
 - c. If he has no fever and no other signs and symptoms, stop the treatment.



Here is a summary of what to do when treating a cold.

1. Give aspirin.
2. Give cough syrup.
3. Give the cold medicine for the nose.
4. Have the patient get much rest.
5. Have the patient gargle with salt water.
6. Have the patient drink liquids.
7. Have the patient eat good food.



COUGH

One of the signs of a cold is a cough. Sometimes, however, a person may have a cough but have no cold. It is necessary for the Village Health Promoter to know how to treat a patient who has a cough but no cold.

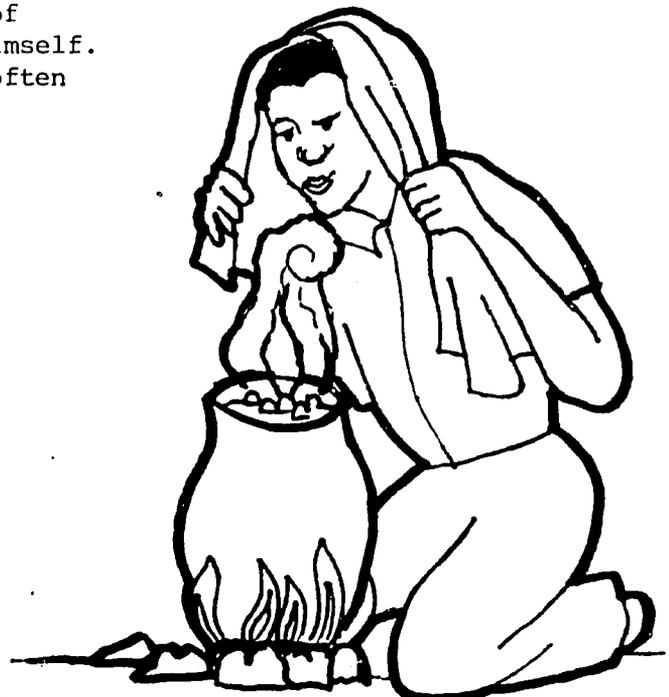
There are two kinds of cough: a) mild and b) serious. A mild cough is a dry cough. Nothing is coughed up - not even spit. If the patient has a dry cough, this is what to do:

1. Have the patient take cough syrup:
 - a) adults: 1 to 2 teaspoons every four hours.
 - b) children: 1/2 to 1 teaspoon every four hours. (1-12 years)



2. If the patient smokes, have him stop. Smoke makes the cough worse.

3. Have the patient breathe in the steam from boiling water. Tell the patient not to put his face too close to the pot of boiling water or else he might burn himself. Have him do this once a day, or more often if he can.

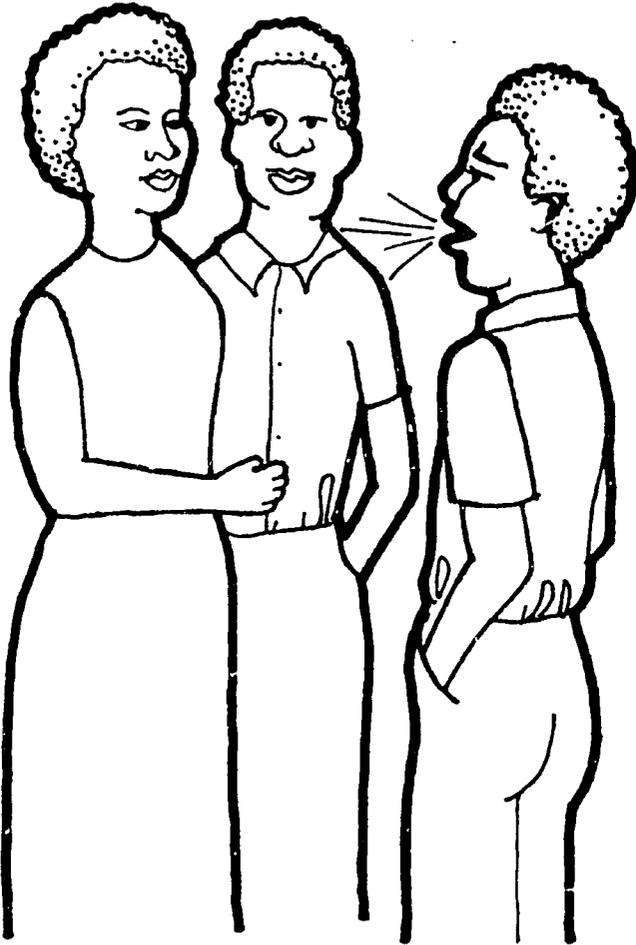


4. Check the patient in seven days.

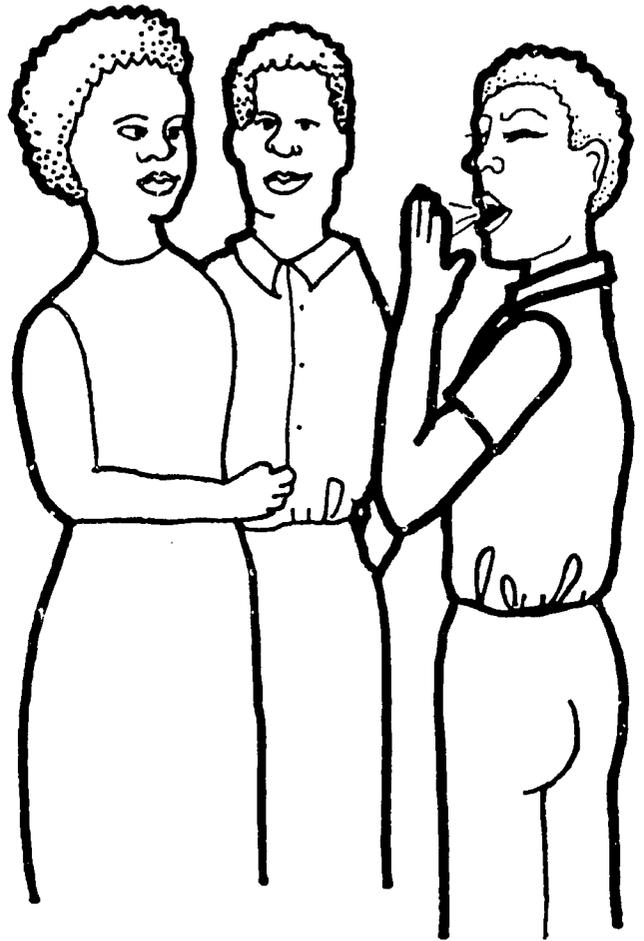
5. If the patient's cough is not better, send him to the health post.
6. If the patient has stopped coughing, stop the treatment.
7. If the patient is still coughing, but the cough is better, continue the treatment for 3 days. Then check on him again.
8. If he has stopped coughing, stop the treatment.
9. If he is still coughing in the same way as when you first saw him, send him to the health post.

The other kind of cough is a severe cough. If a patient has a serious cough, he will cough up green or yellow spit or he will cough up spit with blood in it.

If the patient coughs spit which looks green, yellow or bloody, send him to the health post IMMEDIATELY. The person could be very sick and need special treatment.

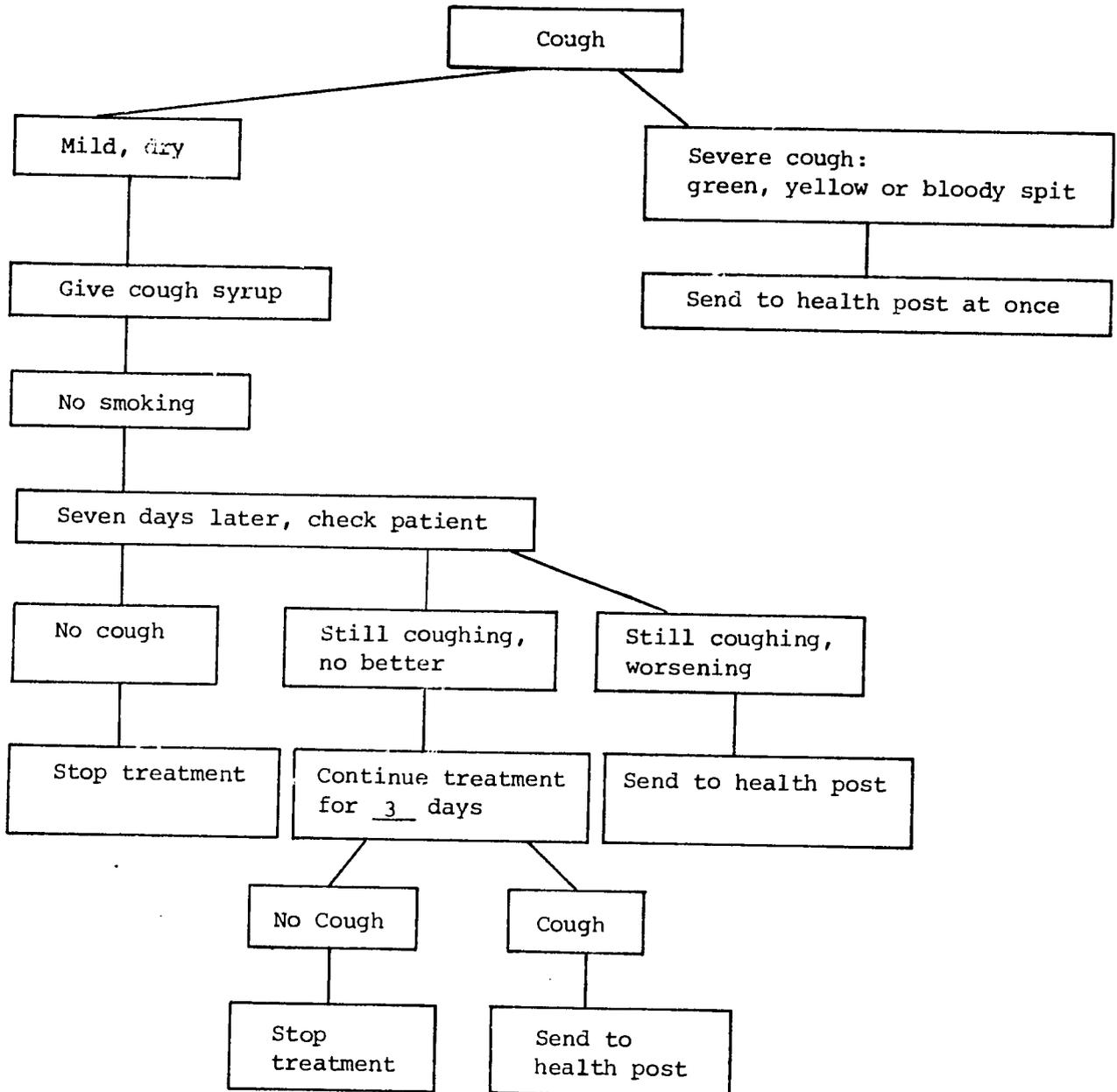


When you cough like this, you spread sickness to others.



When you cover your cough and turn away from others, you do not spread sickness.

Here is a summary of what to do when treating a person who has a cough but no cold.



EAR PROBLEMS

Earaches are common problems in children. Often the child has a fever at the same time. Or a sore throat. Or a bad cold. Sometimes even pus comes out of the ear. When there is pus, the problem is more serious. Pus is a sign of an illness.

Adults sometimes may have these same ear problems. So the treatment can be used for both children and adults.

EAR HURTS

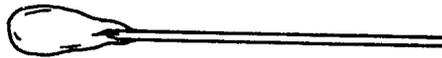
If the patient has only an earache with no pus inside the ear, here is what to do.

1. Tell the patient to take aspirin for the pain for three days.
2. (The patient may only have a bad cold or sore throat which is causing the ear to hurt. Check for these things and treat them too.)
3. Tell the person that he should not get water in his ear.
4. Check the patient in three days. Or have the patient return to you if pus forms in the ear sooner.
5. *If the pain has stopped, have the patient stop taking the aspirin.
*If there is now pus in the ear, follow the steps #6-10 on the next page.
*If there is no pus but there is still pain, send the patient to the health post.

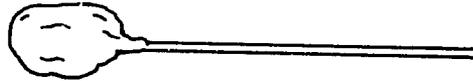
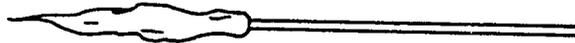
PUS IN THE EAR

If there is pus in the ear, here is what to do.

6. Have the patient take aspirin for the pain.
7. Remove the pus. This is important. Use cotton to remove the pus carefully from the ear. If the cotton is wrapped around a short stick, or something like that, the job will be easy. The stick with cotton on the tip should look like this:



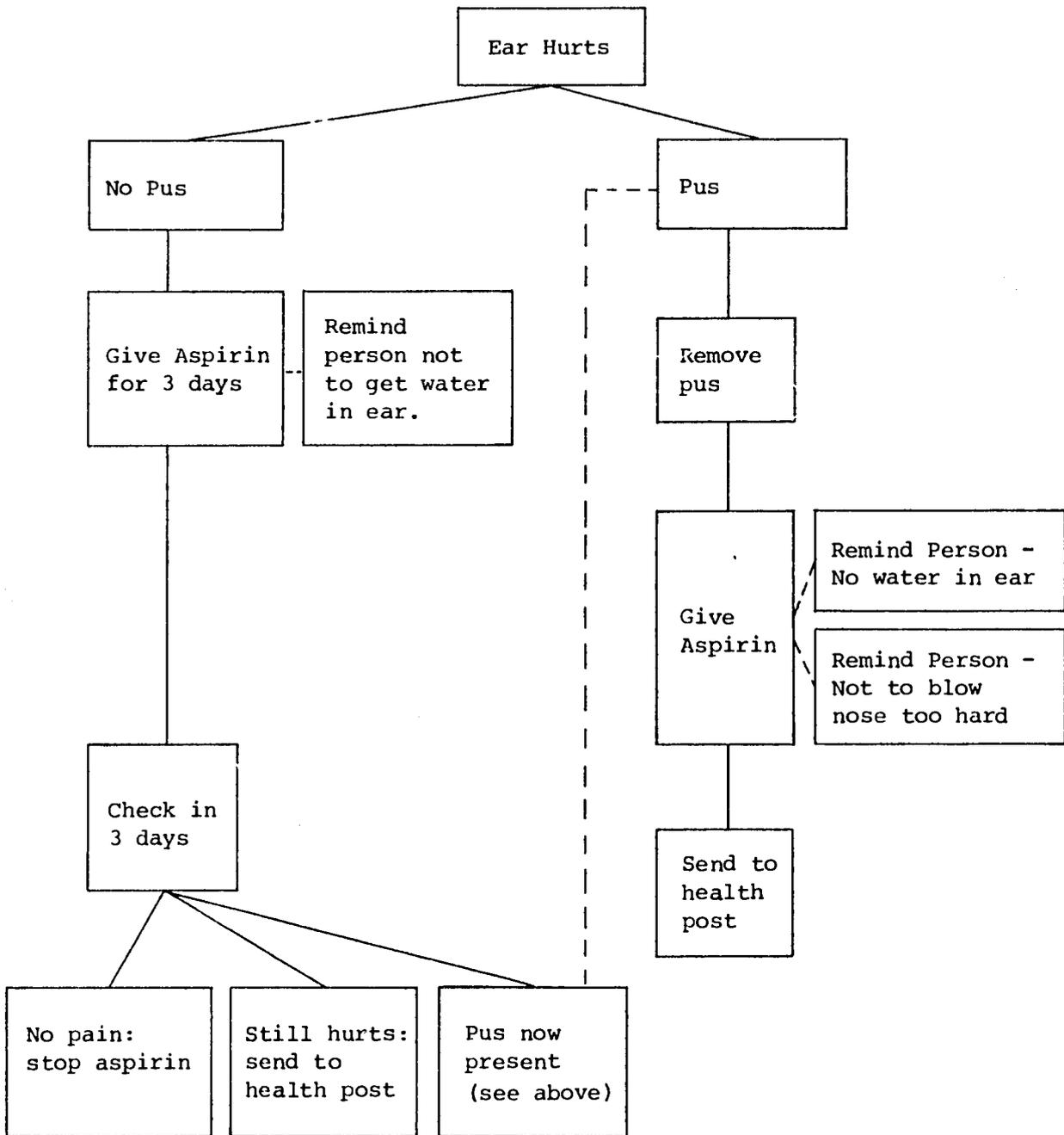
NOT like these:



Note: Be careful not to damage the ear when you put anything inside it!

8. Tell the patient not to get water in his ear.
9. Tell the patient not to blow his nose too hard.
10. Tell the patient to go to the health post for special medicine.

Here is a summary of how to treat an earache.



MALARIA

IDENTIFYING MALARIA

Malaria is an illness spread by the tiny mosquito. The mosquito carries the malaria germ inside its body and can spread the disease in two ways.

1. When it bites, the mosquito gives the person the disease.
2. When a healthy mosquito bites a person infected with malaria, the mosquito becomes infected and will infect anyone when it bites again.

Malaria is one disease that has very special signs so there is no mistaking a case of malaria. Here is a list of those signs:

1. A temperature which gets higher very quickly.
2. Chills which cause the body to shake.
3. A dull, weak, and lifeless feeling.
4. Headache.
5. Nausea.
6. Sweating.

These signs and symptoms attack the person in three stages as described on the next page. Each stage of the attack may last up to several hours. When a person first catches malaria, these attacks happen every one to three days. The number of attacks goes down the longer the person has the disease. This can be from several weeks to a couple of months.

However, if malaria is left untreated or is not treated correctly, the person may develop a chronic case of malaria. This means that over a period of up to ten years the person will have attacks every now and then. Untreated malaria may even cause death.

What are these malaria attacks like? What happens during one of them?

Each attack has three stages. What happens during each stage is described below.



1. An attack of malaria starts with chills and a fever. Usually headache and nausea are present at the same time. The person will feel so cold that he will shake for fifteen minutes to an hour. The fever begins to go up.



2. In the second stage of the attack the fever goes up very rapidly and very high, even to 40°C! The person feels very hot and very weak. Sometimes he is crazy or delirious because of the high fever. This stage lasts about one hour.



3. In the last stage of the attack, the person sweats so much that the sweat pours off almost like rain. The fever goes down. After the attack, the patient feels a little better, but he is still not well. He is also very tired. He may even fall asleep.

Many times, especially when infants and children are concerned, the attacks are different from the description above. The attacks may not happen as often or they oftentimes consist only of fever without the chills and the sweating.

If you suspect that a person has malaria, then it is necessary to begin giving the patient special medicine so that he can get well. The medicine which you will use is Chloroquine. It is in your medical bag. Give this medicine to all your malaria patients according to the schedule below.

CHILDREN (1 month - 12 months)

First day:	a) 1 tablet b) six hours later: 1/2 tablet
Second day:	1/2 tablet
Third day	1/2 tablet

CHILDREN (1 year - 4 years)

First day:	a) 2 tablets b) six hours later: 1 tablet
Second day:	1 tablet
Third day:	1 tablet

CHILDREN (5 - 8 years)

First day:	a) 3 tablets b) six hours later: 1-1/2 tablets
Second day:	1-1/2 tablets
Third:	1-1/2 tablets

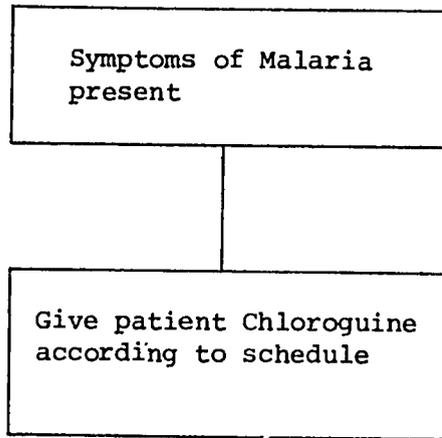
CHILDREN (9 - 14 years)

First day:	a) 5 tablets b) six hours later: 2-1/2 tablets
Second day:	2-1/2 tablets
Third day:	2-1/2 tablets

ADULTS (14 years and up)

First day:	a) 10 tablets b) six hours later: 5 tablets
Second day:	5 tablets
Third day:	5 tablets

Here is a summary of how to treat malaria.



PREVENTING MALARIA

Spraying

Besides treating malaria, the Village Health Promoter has another important responsibility. This is to help the community prevent the spread of malaria.

Since mosquitoes spread malaria, it is necessary to kill them. One way to do this is by spraying. In this method a very thin coating of a poison is sprayed on the walls and ceilings inside the houses in the area of the malaria infection. Since the walls and ceilings are used as resting places by the mosquitoes, they will be killed by the poison when they land. The poison will stay on the walls and ceilings for a long time and will continue to kill the mosquitoes.

What kind of poison do you use? How do you spray it on? You use a poison called DDT which comes in the form of a powder. You mix together one kilogram of powder and fourteen liters of water. This should make enough solution to spray twelve houses.

The poison is poured into a spray machine which your teacher will show you in class. He will also show you how to make the solution and how to use the spray machine.

The poison is sprayed on the walls and ceilings with a very fine mist. Spray on only enough to dampen the surfaces. Do NOT spray so much that the poison runs down the wall or drips off the ceiling.

The poison will kill mosquitoes for up to six months. In an area of heavy malaria infection, houses should be sprayed every six months. It is very important to spray during the rainy season because that is when mosquitoes like to breed.

Before this section on spraying is concluded, a warning about the poison is necessary. This poison used for the mosquitoes is also a poison for human beings and animals. Do not spray any food. Keep the food stored when spraying. Keep your hands as clean as possible when spraying. After you have sprayed, wash your clothes and your body, especially your hands. If you use proper care, there will be no danger when using this poison to kill the mosquitoes.

Draining Water, Cleaning Compound, Burning Leaves

Besides spraying, there are other preventive measures that can be taken. Mosquitoes like to breed and grow in pools of water that have not been drained. Maybe there is a big rut in one of the roads that usually has dirty water in it. Maybe there is a swampy area nearby. Maybe the village compound is not as clean as it could be. Empty cans and bottles, broken coconut shells, and other things can be lying in the streets and around houses. These things can fill with water. Mosquitoes love all these places. If you can eliminate these sources of water, you help to eliminate mosquitoes which spread disease. Here is what you can do:

1. Drain all standing pools of water.
2. In those areas which cannot be drained, the water may be treated with a poison to kill the mosquitoes. This is like spraying the houses.
3. Sometimes the water cannot be treated because the water is used for drinking water or because there is a danger that the poison will kill the fish. In such cases, take away all vegetation in the water. Mosquitoes like the shade which these water plants give.
4. Burn this vegetation and other green leaves and branches. The smoke helps to keep the mosquitoes away for a little while. Once you stop the burning, the mosquitoes will come back. It is very useful to burn these things at night when the malaria mosquito likes to bite.
5. Take away from the village compound all bottles, cans or anything that can collect water.

Screening and Nets

The mosquito which causes malaria is a night-time biter. It likes to attack people in the night. So screens on the windows and doors help to keep the mosquitoes out.

Nets protect the sleeping person from mosquito bites. Attached to the ceiling, these nets hang over and around the sleeping area at night. During the day, they can be rolled up to the ceiling and hooked there. Your teacher will show you how to attach these nets.

WHAT TO TEACH THE VILLAGE

As a Village Health Promoter you should:

1. Tell your community what malaria is and that the mosquito spreads the disease.
2. Tell your community why spraying is important and caution the villagers about the poison.
3. Encourage your community to drain or eliminate standing pools of water and to keep the village compound clean.
4. Advise your community to use screens on windows and doors and nets over sleeping area.

CONJUNCTIVITIS

WHAT IS CONJUNCTIVITIS?

Conjunctivitis is an eye disease. It is a disease of the white part of the eye. It is a very common disease - especially among children.

How can you tell if a child has conjunctivitis? By looking for the signs.

Here are the signs which tell you that a child has conjunctivitis:

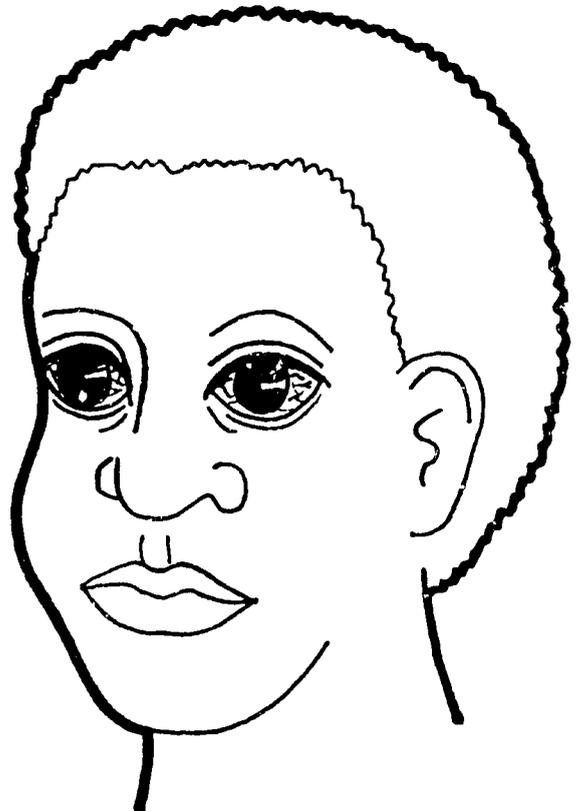
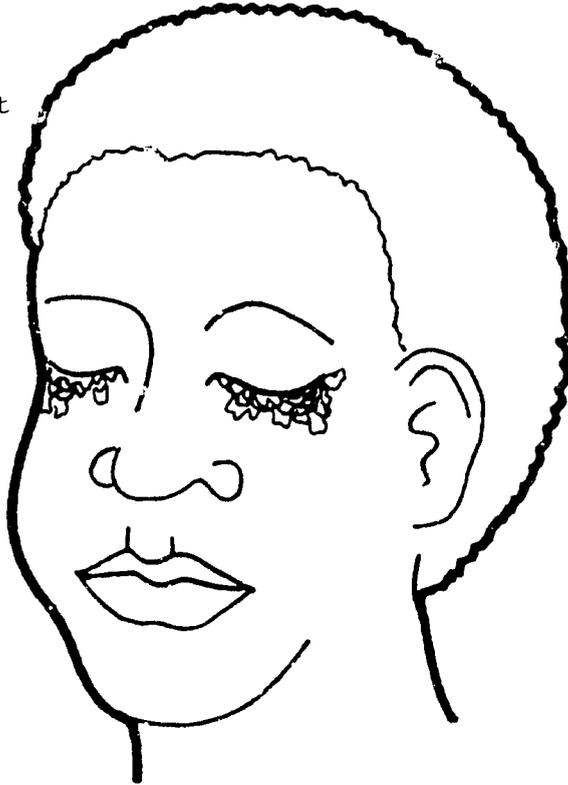
- * The most important is the pus which comes out of the eyes. The pus can look two different ways: 1) it can be sticky and white or yellow, 2) the pus can also be watery and clear. Both ways point out conjunctivitis. After the pus comes out of the eyes, it dries and makes the eyelids stick together while the patient sleeps. The dried, crusty pus needs to be washed off so that the eyes may open.

- * The white part of the eyes turn red.

- * The eyelids become swollen.

- * The eyes itch and burn.

- * Light makes the eyes hurt.



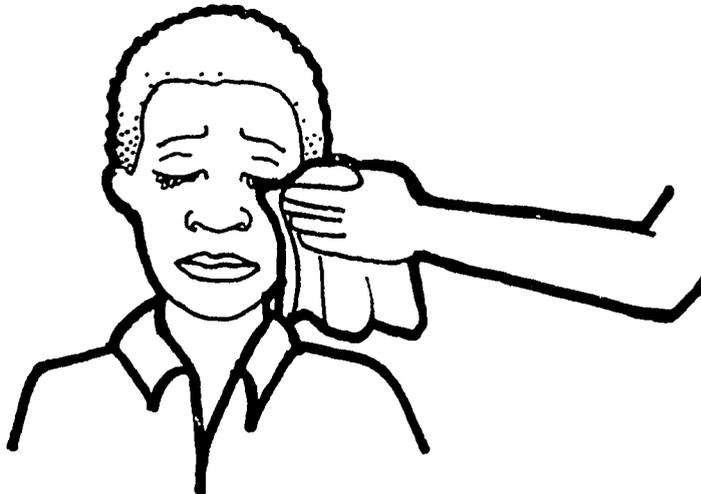
Conjunctivitis spreads from one person to another very easily and quickly. Fingers, clothes, towels, sheets, blankets or anything that the pus touches will spread the disease. When someone touches these things which spread the disease and then touches his eye, he can get the disease.

Flies also spread the disease. They can land on the pus or on any of those things that the pus touches. They then pick up on their hair the germs which cause the disease. When they land on someone, they leave behind the germs which cause the disease.

HOW TO TREAT CONJUNCTIVITIS

Now that you know what conjunctivitis is and how it spreads, you can learn how to treat it. The treatment must be taught to the mothers too so that they can do it at home. While you go through the first four steps, teach those four steps to the mothers. At the same time teach the mothers all the things in the list on the right side of the page.

1. Wash your hands.
 2. Take a soft, clean piece of cloth. Wet it in clean, good water. Using the wet cloth, wipe the eye gently. Wipe from the middle of the face to the edge of the eye. Take a new clean cloth, and wipe from the middle of the face to the edge of the other eye. Always wipe gently from the middle to each edge. Use a different, clean cloth for each eye.
1. Teach the mother steps 1-4 on the left side of the page. Tell her how important it is for her to wash her hands before and after treatment.
 2. Tell the mother to use a clean cloth for each eye. Have her wash the cloth in hot water and dry it in the sun.



3. Pull down the child's lower lid as demonstrated. Put some eye ointment onto the eyelid. Remember: You must wipe the eye first before you use the ointment.

3. Tell her NEVER to put the ointment on the eyelid without cleaning the eye first. Tell her to use the ointment three times a day for one week. She should check with you at that time.



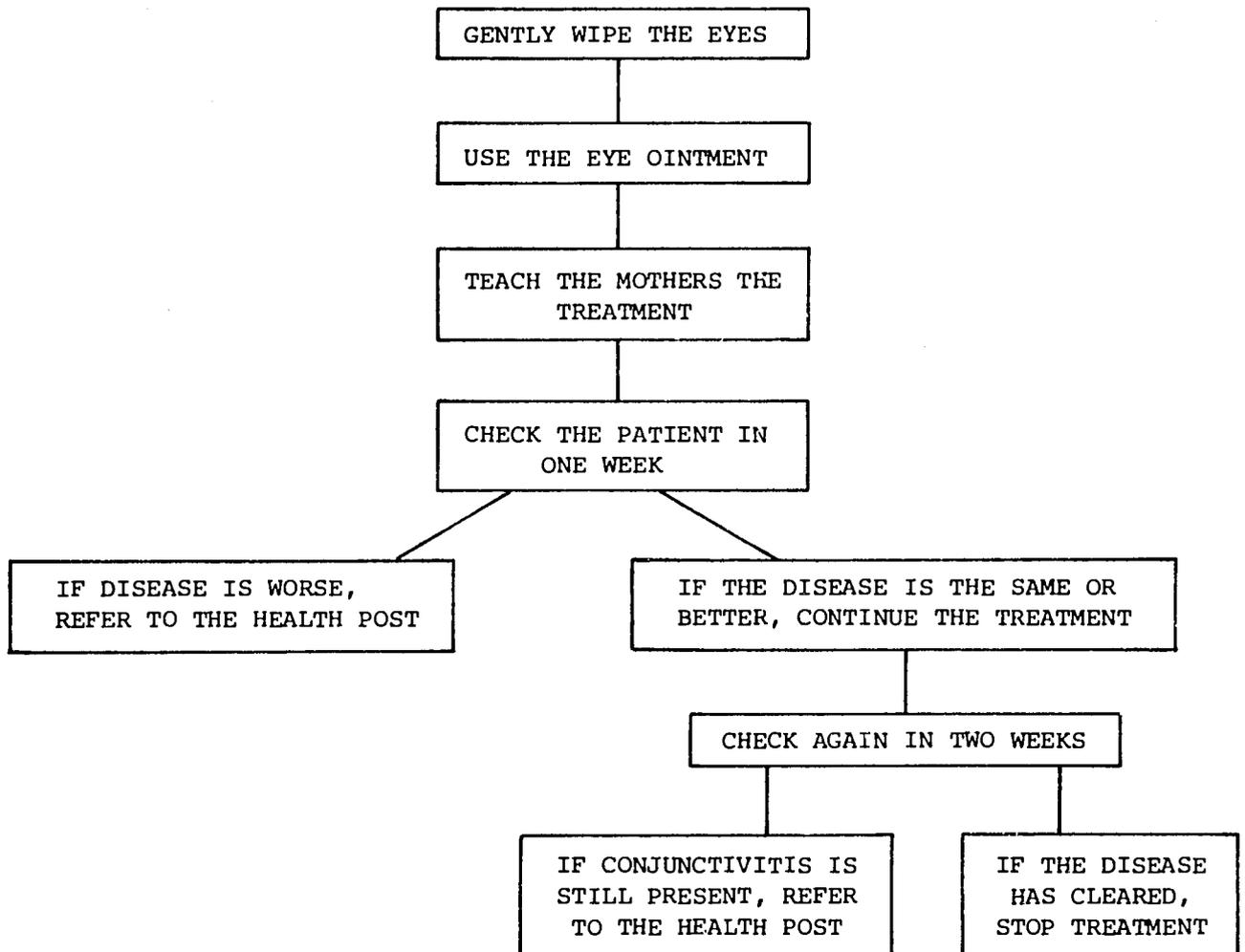
4. Wash your hands again so as not to spread the disease to yourself or others.

4. Have the mother keep the child at home until he is well. He should use his own plate, glass, etc. Family, friends, and other children should not touch anything which the child uses. In fact, the mother should keep the child himself from touching or rubbing his own eyes. She should also wash his towels, clothes, sheets, blankets, etc. in hot water. In addition, she should keep flies out of the house at all times since flies can carry the disease. Tell her that doing all these things prevents the disease from spreading to herself, her family and others.

5. Check the child in a week. The eye should look a little better. If the eye looks worse, refer the child to the health post. If it does not look worse, continue to use the ointment for another two weeks.

6. Check the child again in two weeks. If the disease is still present, refer the child to the health post. If the disease is no longer present, stop the treatment.

Here is a summary of what to do when treating conjunctivitis:



IMPETIGO

WHAT IS IMPETIGO?

Impetigo is a skin disease that is very common in infants and children. A child with impetigo has sores on his body. These sores are found most often on the child's face, nose, ears, head or buttocks.

The sores start as red spots. They then fill with fluid and become blisters. Soon the blisters fill with pus and break open. The wet pus covers the sores and turns to a yellow crust. It is at this stage when you will most often see the child with impetigo.

There are two special things about impetigo. First of all, when the sore begins to heal, it heals in the middle. As a result, the yellow crust makes a circle on the skin. This circle helps you to know that the child has impetigo.

Secondly, impetigo spreads very easily to other parts of the child's body and to other people as well. Later in the unit, you will be taught ways to keep the disease from spreading.



A child with impetigo.

HOW TO TREAT IMPETIGO

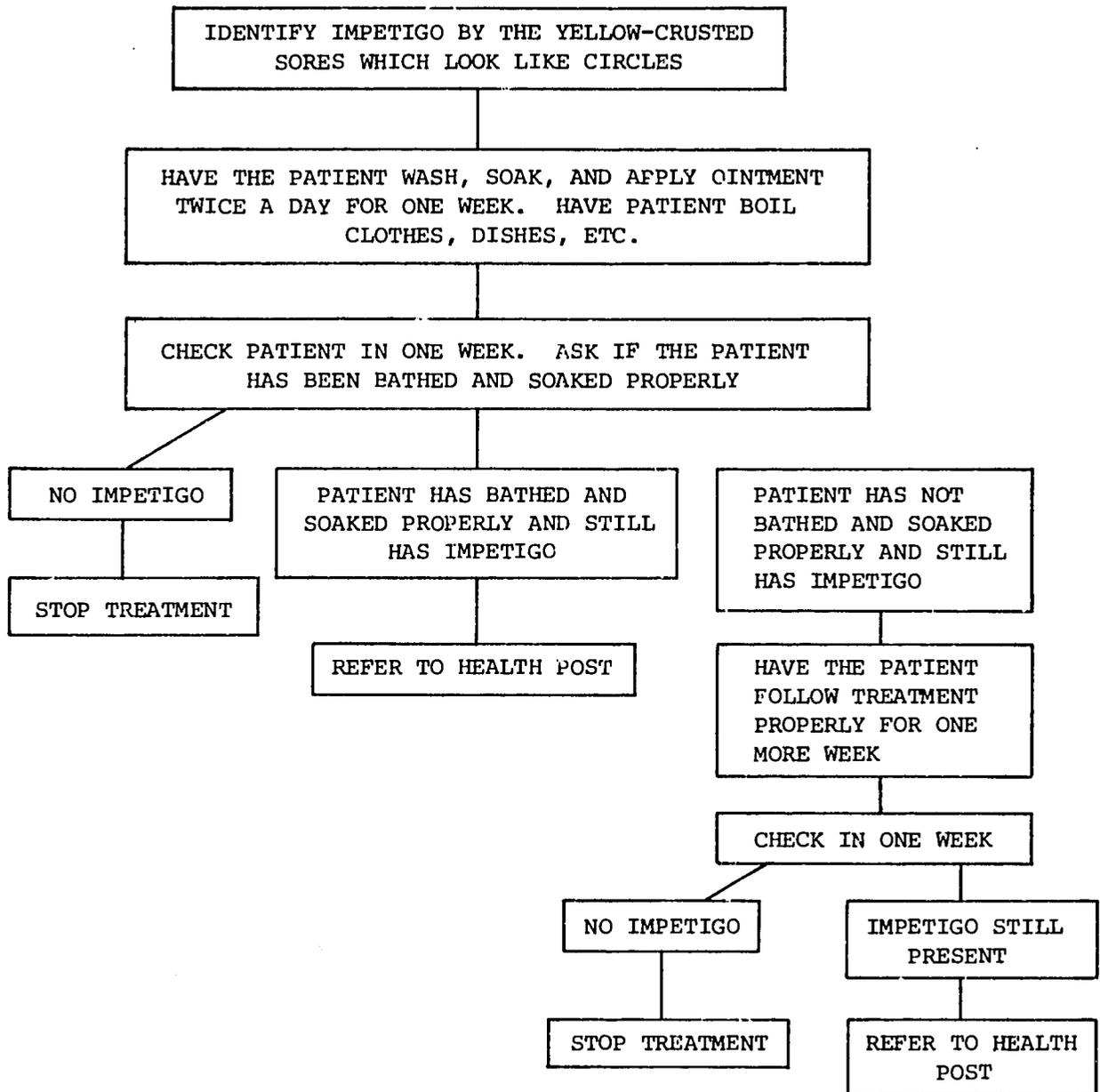
There is a special treatment for impetigo which requires that the sick child be bathed twice a day. There are seven steps to the treatment. The Village Health Promoter must teach this treatment to the patients.

Here are the seven steps:

1. Cut away the child's hair from around all the sores.
2. Wash the child's body with soap and water twice a day for one full week.
3. Then soak the sores in water which has been mixed with hypochlorite or permanganate solution after each bath.
4. Then, with a clean cloth, apply chlortetracycline ointment to the sores.
5. All cloth and equipment such as the scissors and razor blades used to cut the hair must be boiled. The patient's clothes too must be boiled. Dry everything in the sun. This is necessary to keep the disease from spreading.
6. Check the child in one week. Ask if the mother has bathed and soaked the child as she was directed. If the mother has and the child still has impetigo, refer the child to the health post.
7. If the mother has not bathed and soaked the child properly, explain the treatment to her again. Tell her to carefully follow the treatment for one week again. At that time check the child. If he still has impetigo, refer him to the health post.

NOTE: Tell the mother of the child how important it is for her to bathe and soak the child twice a day for one week. If she does not do this, then the child will not get well.

Here is a summary of what to do to treat impetigo.



CONTROLLING AND PREVENTING IMPETIGO

Impetigo spreads very easily and quickly from one child to another. This happens when one child touches the infected skin of the sick child. It also can happen when a child touches anything which has touched the infected skin - such as glasses, bedding, towels, and anything else.

Since impetigo spreads so easily, it is important that the sick child stay at home and not play with or be near other children, even his own brothers or sisters. No one should use anything which the sick child uses - such as towels, clothing, dishes, drinking glasses. The sick child should have his own things while he is sick, such as his own plate, drinking glass, and spoon. These things should be kept in a different place away from those used by the rest of the family.

To kill the impetigo germs BOIL everything the sick child uses. Once these things have been boiled and dried in the sun, they may be used again by others.

Besides controlling the disease once someone has it, it is necessary to prevent the disease from happening in the first place. The best way to prevent impetigo is to practice good personal and family health habits. These are listed in the unit on Keeping Clean.

The Village Health Promoter must teach the villagers all the ways to control and prevent impetigo.

RINGWORM

WHAT IS RINGWORM?

Ringworm is one more skin problem which can be found anywhere on the body. The ringworm sore starts as a small red bump. While it begins to heal in the middle of the bump, the sore grows out to form a red-colored ring or part of a ring. The outer edges of the sore are raised from the skin and can even have small blisters on them. Sometimes ringworm itches, but the itch is not as severe as in scabies.

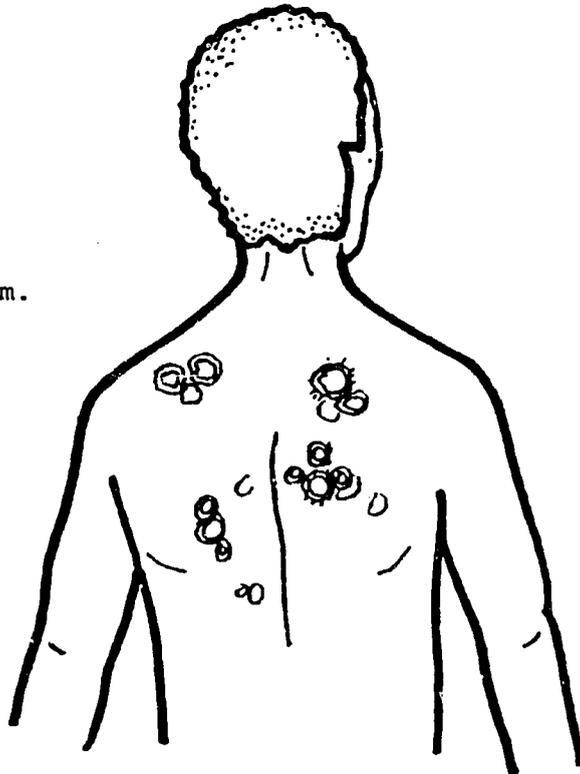
Both ringworm and impetigo form rings on the body. But there are differences. The differences between them are these:

- | | |
|--|---|
| 1. Impetigo is most often found on the face, nose, ears, and buttocks. | 1. Ringworm can be found anywhere on the body. |
| 2. Impetigo is filled with pus and forms a yellow crust. | 2. Ringworm is not filled with pus and forms red-colored rings. |

Sometimes, however, a child can have ringworm and impetigo at the same time.

If this is the case, you must treat the impetigo first and then the ringworm.

A child with ringworm.



HOW TO TREAT RINGWORM

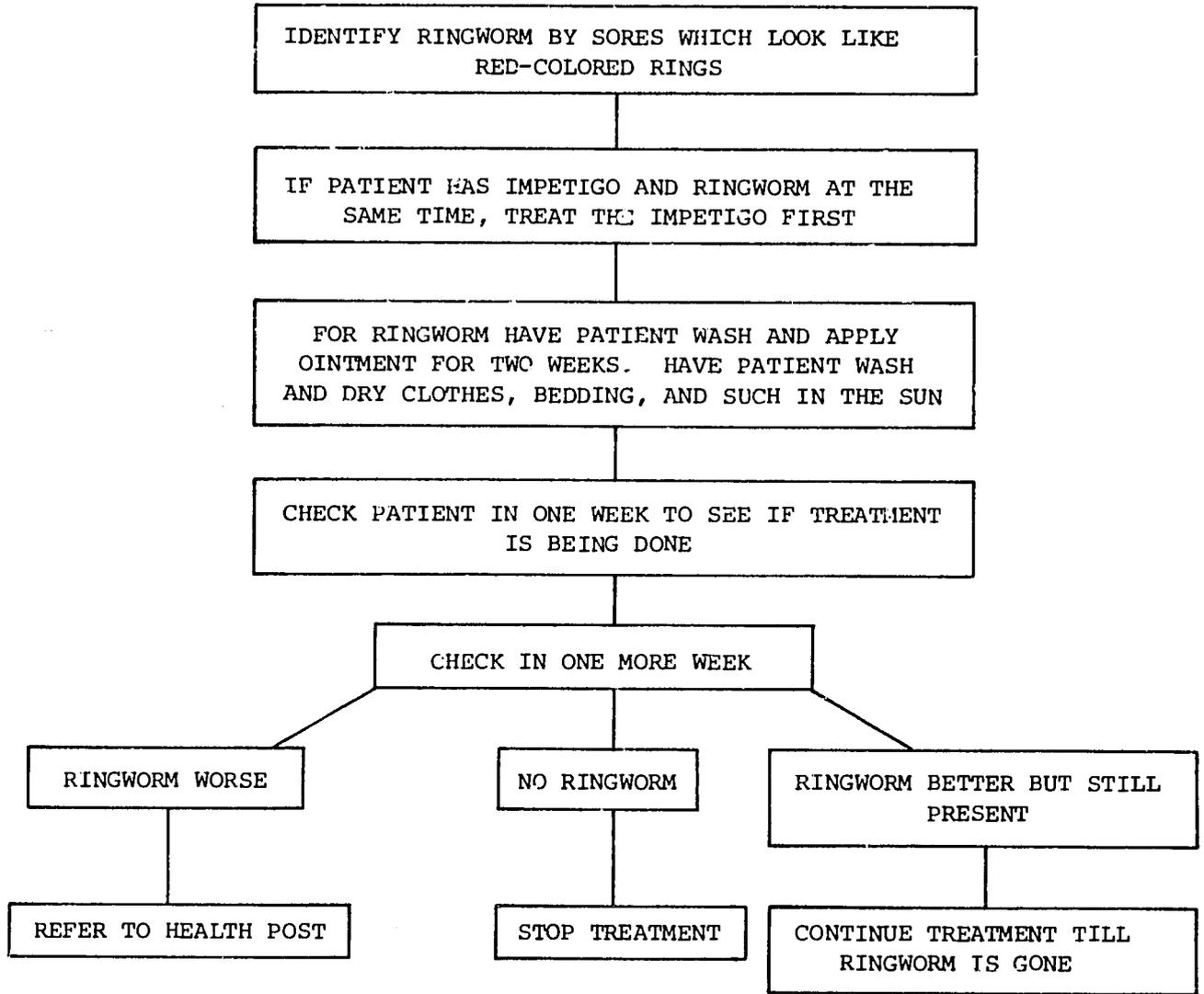
There is a special treatment for ringworm which is to be done twice a day. There are six steps to the treatment. The Village Health Promoter must teach the treatment to the patients and tell them how important it is to continue the treatment until all the sores have healed.

Here are the six steps:

1. Wash the child's skin with soap and water twice a day for two weeks. More time may be needed since the sores heal slowly.
2. With a clean cloth or gauze, apply the special ointment in your health bag to the sores only. Do not put ointment on any part of the body where there is no sore. Ointment on too many parts of the body where it is not needed can poison the child.
3. To keep the disease from spreading, the patient's clothes, bedding, towels, and things like that must be washed and dried in the sun - frequently.
4. Check the patient in one week to see if the treatment is being done properly.
5. Check the patient in another week. If the condition has become worse, refer the patient to the health post.
6. If the ringworm is improving, have the patient continue the treatment until the problem is gone. Tell patients that the sores may heal slowly and that they may need to continue the treatment for another few weeks or more.

NOTE: Sometimes a person will come to you with an itch. He does not have ringworm or impetigo or even scabies which you will learn about later. If a person has an itch you cannot identify, apply calamine lotion to those parts of the body that itch. If the itch has not gone away after four or five days, send the patient to the health post for treatment.

Here is a summary of what to do to treat ringworm.



CONTROLLING AND PREVENTING RINGWORM

Ringworm, like impetigo, can spread from one child to another. It is important, therefore, to do things to control or prevent its spread.

A child with ringworm should not play with or be near other children, even his own brothers and sisters. No one should use anything which the sick child uses, such as towels, clothing, dishes, drinking glasses. The sick child should have his own things while he is sick, such as his own plate, drinking glass, and spoon. These things should be kept in a different place away from those used by the rest of the family.

To kill the ringworm germs, wash everything the sick child uses. Dry them in the sun. Once these things have been washed in very hot water and dried in the sun, they may be used again by others.

Besides controlling the disease once someone has it, it is necessary to prevent the disease from happening in the first place. The best way to prevent ringworm is to practice good personal and family health habits. These are listed in the unit on Keeping Clean.

The Village Health Promoter must teach the villagers all the ways to control and prevent ringworm.

ABSCESSSES AND BOILS

WHAT ARE ABSCESSSES AND BOILS?

Sometimes people get sores on their skin which look like blisters or bumps. These sores are called abscesses and boils. They are filled with a fluid called pus.

This pus can look one of two ways. It can look thick creamy yellow or it can look clear. The skin over these sores is so thin that you can easily see the pus underneath. Also, because of the thin skin, the pus can easily get out.

There is little difference between an abscess and a boil. One big difference, however, is that the boil starts on the skin where the hair grows.

WHAT ARE THE SIGNS?

How do you know if a person has an abscess or a boil? By looking for the signs. Here is a list of the signs for these sores:

1. The skin becomes red and starts to itch.
2. The sore starts to fill with pus. There is much pain.
3. The sore gets bigger and bigger until the pus is ready to come out.

ALWAYS KEEP THE AREA OF THE SORE CLEAN.

HOW TO TREAT ABSCESSSES AND BOILS

The first thing to learn and remember about treating these sores is this: NEVER squeeze abscesses and boils! Why? Because squeezing causes them to spread. Tell your patients this, too.

It is true that the pus inside the sore must come out. But it must come out only when it is ready. To make the pus ready to come out, do this:

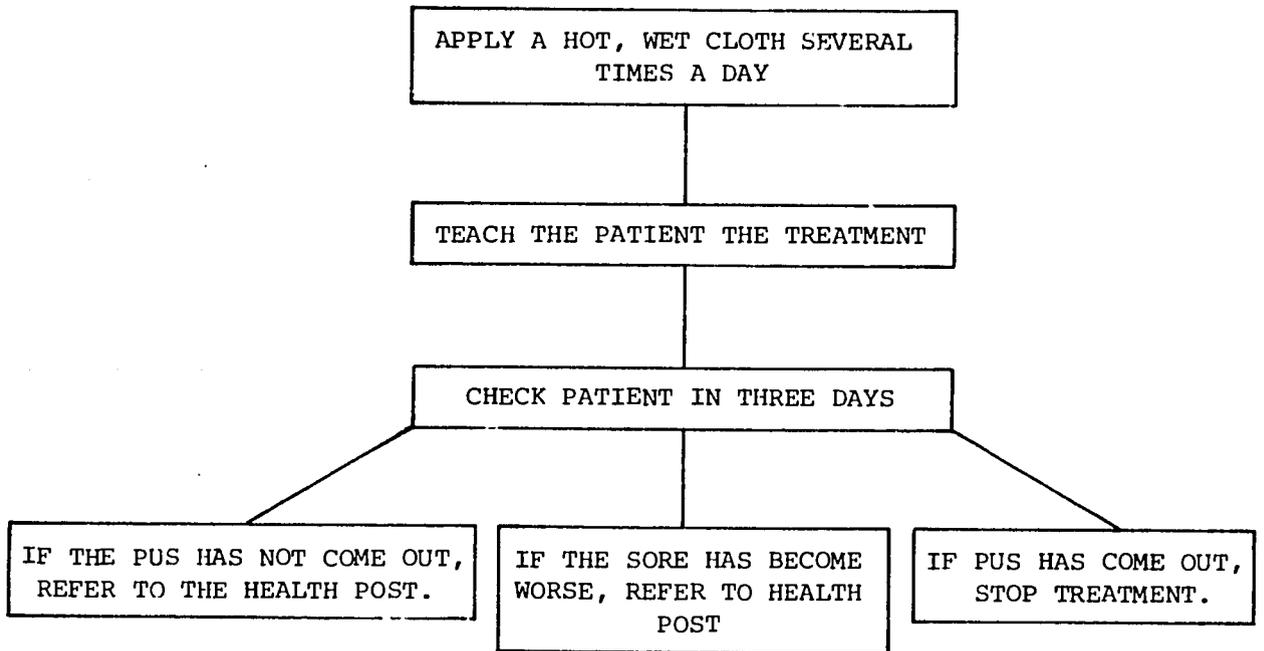
1. Take a clean cloth.
2. Soak it in good hot water.
3. Put the wet cloth on the sore.
4. Do this several times a day.

This treatment also takes away the pain for awhile. Teach the treatment to the patients so that they can do it at home. Also tell them how important it is to keep the area of the sore clean once the pus starts to come out.

Check the patient in three days. If the pus has not come out or if the sore has become worse, refer the patient to the health post.

NEVER SQUEEZE ABSCESSSES AND BOILS!

Here is a summary of what to do when treating abscesses and boils:



OPEN SORES AND WOUNDS

WHAT IS AN OPEN SORE?

An open sore is a large sore on the skin. It happens because a cut or scratch does not heal and, in time, gets worse. The edges of the sore turn red, and a scab begins to form. Under the scab is pus which breaks the sore open. From then on the open sore gets bigger and bigger. Pus or other fluid drains out of the sore all the time.

You will find open sores most often on the legs. Why? Because people get cut or scratched there most often.

Open sores are ugly to look at. Flies, carrying disease, are attracted to them. If not treated properly, open sores get dirty and, then, become even worse.



This man is sad because of the bad open sore on his leg.

HOW TO TREAT OPEN SORES

If it does not heal, a cut or scratch can turn into an open sore. Dirt can cause the cut or scratch not to heal. So the first thing to know before treating open sores is this: always keep any cut or scratch clean with soap and good water. Teach this to your fellow villagers. If they do this, then their cuts or scratches do not have to become ugly open sores.

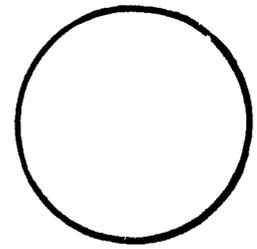
The next thing to remember about open sores is this: when an open sore is small, it can be treated more easily. The earlier you can treat an open sore, the earlier it will heal. Tell this to your fellow villagers too. As soon as anyone has an open sore he should come to you for treatment.

Now that you know these two important things, you can learn how to treat open sores. You will need to know how to treat both small and big sores. Let us look at the treatment for both of them. All drugs and materials are in your health bag.

KEEP ALL SCRATCHES AND CUTS CLEAN SO THEY WON'T BECOME BAD SORES.

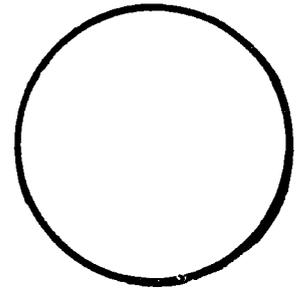
Small Sores: A small sore is about this size:

1. Soak sterile gauze in hypochlorite.
2. Carefully clean the sore with this gauze.
3. Pour just enough gentian violate over the sore to cover it.
4. Cover the open sore with a sterile gauze pad which is dry. Tape it into place.
5. Do steps 1-4 once a day for five days.



Big Sores: A big sore is about this size:

1. Soak sterile gauze in hypochlorite.
2. Carefully clean the sore with this gauze.
3. Soak a second piece of sterile gauze in hypochlorite.
4. Cover the open sore with this second piece of gauze and tape in place.
5. Do steps 1-4 twice a day for five days.

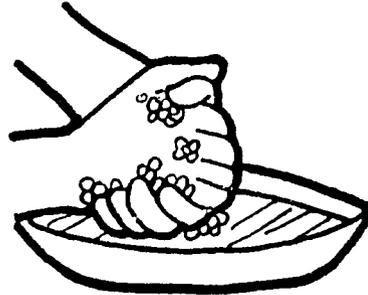


Teach your patients how to treat open sores. Give them enough drugs, gauze, and tape for five days. Then tell the patients to treat their open sores for five days.

At the end of five days check each patient. If his open sore is getting better, have the patient continue the treatment until the sore heals. However, if the open sore is not getting better, refer the patient to the health post.

NOTE: When a person comes to you with a cut or scratch that has not yet become an open sore, here is what to do.

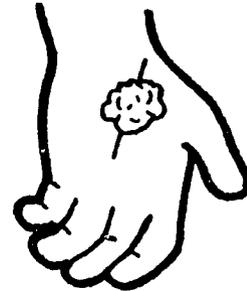
1. Wash your hands.



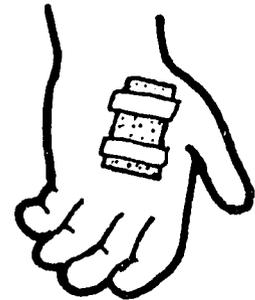
2. Wash the cut or scratch.



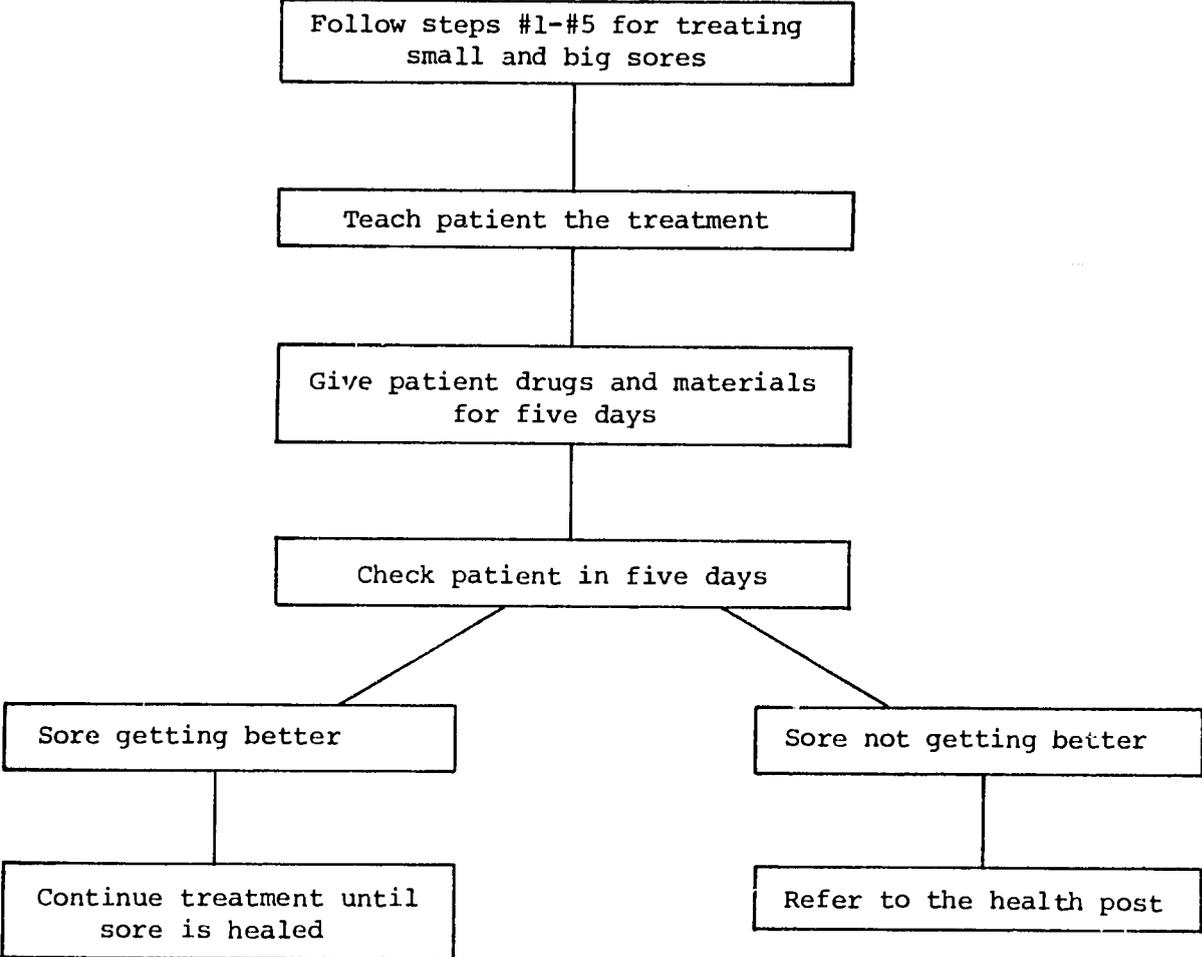
3. Clean the cut or scratch with cotton soaked in alcohol.



4. Cover with gauze and tape in place.



Here is a summary for how to treat open sores:



PREVENTING OPEN SORES

The best way to prevent open sores is for everyone in the village to always keep any cut or scratch clean with soap and good, clean water. If the villagers do this, then their cuts and scratches do not have to become ugly open sores.

Tell the villagers again how important it is to keep themselves clean. They should always practice good, personal health habits such as:

- *Keep all small scratches and cuts very clean so they won't get worse.
- *Wash your hands with soap and water when they are dirty and after you have relieved yourself.
- *Wash your body everyday with plenty of soap and good, clean water.

WOUNDS

Sometimes a villager may come to you with a more serious cut or wound. Perhaps he has a deep cut on his foot from some broken glass. Perhaps he badly slashed his leg on a fence or wire. Maybe the wound bleeds very much. These are examples of serious wounds.

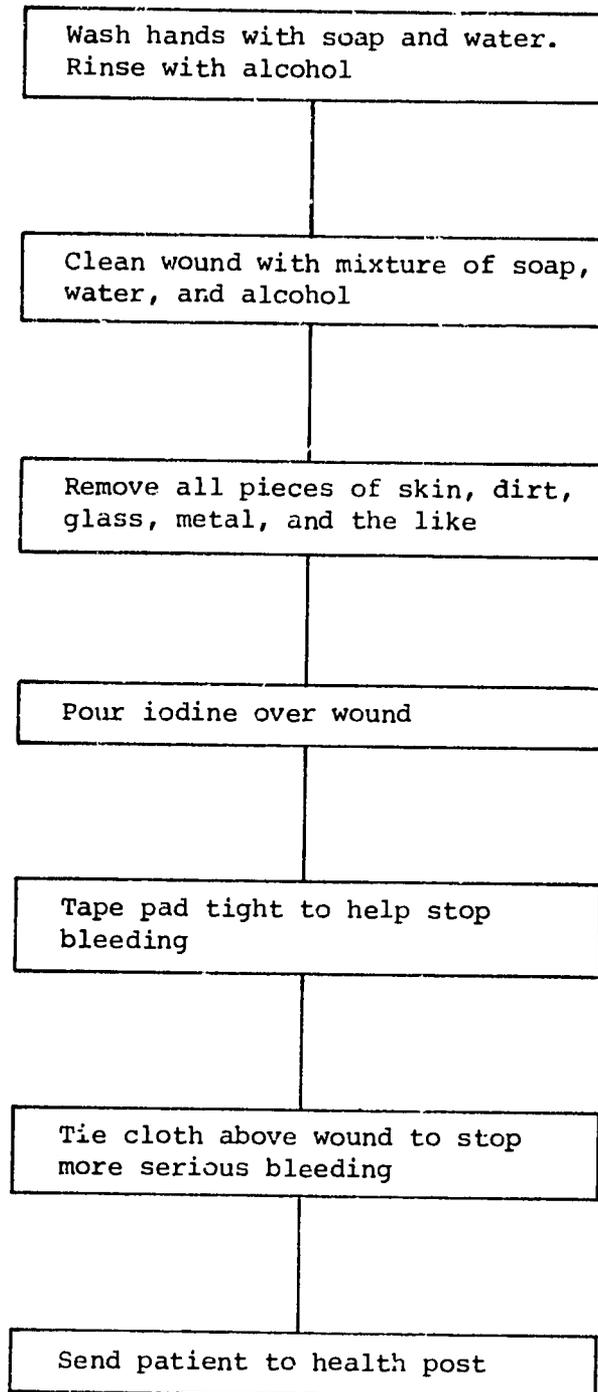
Here is what you are to do.

1. Wash your hands very well with soap and clean water. Rinse with water. Then rinse your hands with alcohol.
2. Add some alcohol to a soap and water mixture. Use this mixture to clean the wound. Be gentle and very careful.
3. If there is any oil or grease in the wound, use a small amount of kerosene or gasoline on a cloth to remove it. Then wash the wound with the soap mixture as in #2 above.
4. What should you do if pieces of skin, dirt, glass, metal, wood or the like will not come out after you have cleaned the wound? If this happens, use sterile scissors or forceps to remove the pieces. This step is very important. The wound must be free of everything. The wound must be very clean.
5. Pour iodine over the wound.
6. Tape a sterile pad in place. To help the bleeding, be sure that you tape the pad on tight. Use pressure when taping the pad. It sometimes helps to hold the pad in place with your hand for awhile too.

NOTE: Sometimes the blood will pour out of a wound instead of trickling out. If this happens, you must do something else. Tightly tie a cloth above the wound. This will help stop the pouring of blood. This is helpful on the arms and legs. Your teacher will demonstrate how and where to tie the cloth.

7. IMMEDIATELY take the patient to the health post. Tell what kind of wound it is. The patient may need special medicine or injections.

Here is a summary of what to do for more serious wounds:



BURNS

WHAT CAUSES BURNS?

It is very possible that someone will come to you because he has a burn.

A person can get a burn in many ways. Let us see what can cause a burn.

1. Fire. A person has put his hand, leg or some part of of his body too close to a fire.

A person has touched a hot pot taken off of the fire.

A person has been in a building that has caught on fire.
2. Water. A person has spilled hot water on himself.
3. Sun. A person has been out in the sun too long.

THREE TYPES OF BURNS

All burns do not look alike. They look different because some burns are more serious than others. There are three different types of burn.

Type I: The skin is red and hurts. There are no blisters.



Type II: The skin is still red and hurts very much. There are blisters.



Type III: The burn is black and charred as if the skin were cooked on an open fire. It may look like charcoal. This type of burn is so serious and so bad that the patient will have little or no pain. This may be hard to believe, but it is true.



HOW TO TREAT BURNS

Just as burns are different so is what you can do for each type of burn.

Here is what you are to do.

- Type I:
1. Give aspirin for the pain. (See next page).
 2. Cut away any clothing sticking to the burn.
 3. Dip the burn in cool good water.
 4. Gently dry the burn.
 5. Apply the burn ointment in your medical bag to a clean piece of gauze and tape in place.
 6. Have the patient keep the bandaged burn clean.
 7. Check the patient in one week. If the burn has not healed, clean the burn again and apply fresh ointment and gauze.
 8. Check the patient in another week and remove gauze.
- TYPE II:
1. Give aspirin for the pain. (See next page).
 2. Send the patient to the health post.
- TYPE III:
1. Give aspirin for the pain. (See next page).
 2. Send the patient to the health post.

GIVING ASPIRIN

1. Adults (12 years and older): 2 tablets every 4 hours.



2. Children (5 to 12 years): 1 tablet every 4 hours.



3. Young children (2 to 4 years): $\frac{1}{4}$ tablet every 4 hours.



4. Babies (less than 2 years of age): $\frac{1}{4}$ tablet every 4 hours.

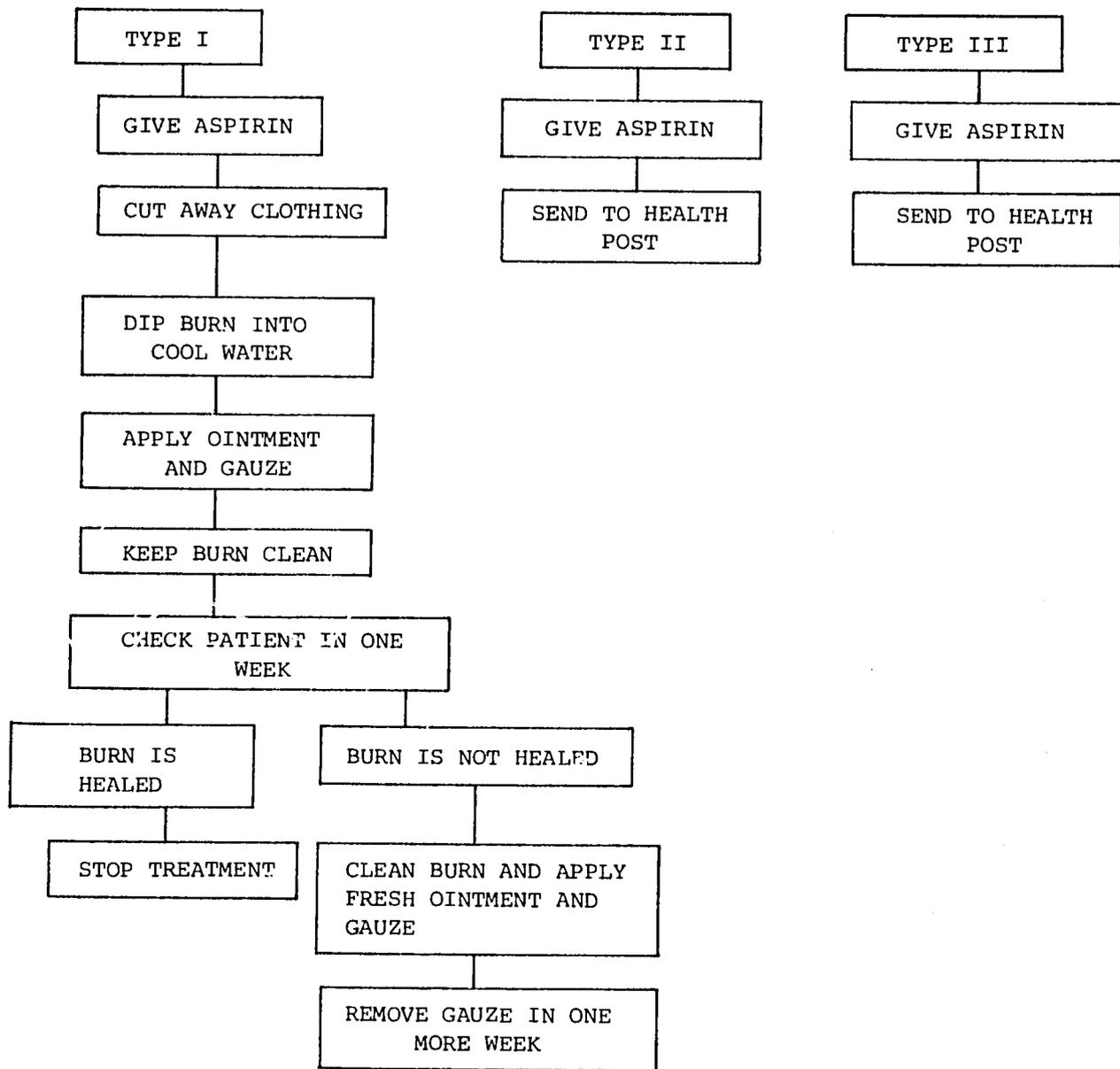


The patient must take his aspirin tablets at four different times during the day. Instead of taking the tablets every four hours, the patient could take the aspirin:

1. Upon rising.
2. When returning from working in the fields.
3. At the evening meal.
4. When going to sleep.

Or perhaps the patient could take the aspirin in the morning, early afternoon, late afternoon, and evening.

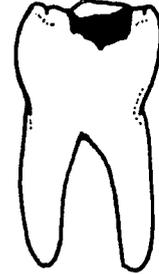
Here is a summary for treating burns:



TOOTHACHE

In the unit called Keeping Clean, you learned the importance of good care for the teeth. But people do not always take good care of their teeth. They may come to you and say that their teeth hurt.

They have a toothache. This pain is caused by a hole in the teeth called a cavity. A cavity happens when the teeth begin to rot. The wrong food and bad health habits cause teeth to rot.



When a person comes to you with a toothache, here is what the Village Health Promoter should do:

1. Clean the cavity of all tiny pieces of food.
Use a clean, tiny piece of wood or toothbrush for this. Then have the patient rinse his mouth out with warm salt water.
2. Have the patient take aspirin for the pain.
3. If the pain stays for a week or gets worse, send the patient to the health post. The tooth may have to be pulled.
4. If you see any pus, swelling or an abscess around the tooth, there is much infection. Tell the patient to go quickly to the health post. He will need special medicine to cure the infection. If the infection is too bad, the tooth may have to be pulled.

WHEN THE PAIN IS SMALL, THE PROBLEM IS SMALL.

WHEN THE PAIN IS GREAT, THE PROBLEM IS GREAT.

SEE THE VILLAGE HEALTH PROMOTER BEFORE THE PAIN IS GREAT.

Sometimes people will come to you when their gums are red and swollen. Their gums even hurt and bleed easily, too. The treatment for such a problem is good health habits for the teeth. Here is what to tell the patients. Tell them:

1. to clean the teeth and gums more often. This is very important.
2. to rinse the mouth with warm salt water.
3. to eat more and better food.

They should continue to do these things until the redness and swelling are gone.

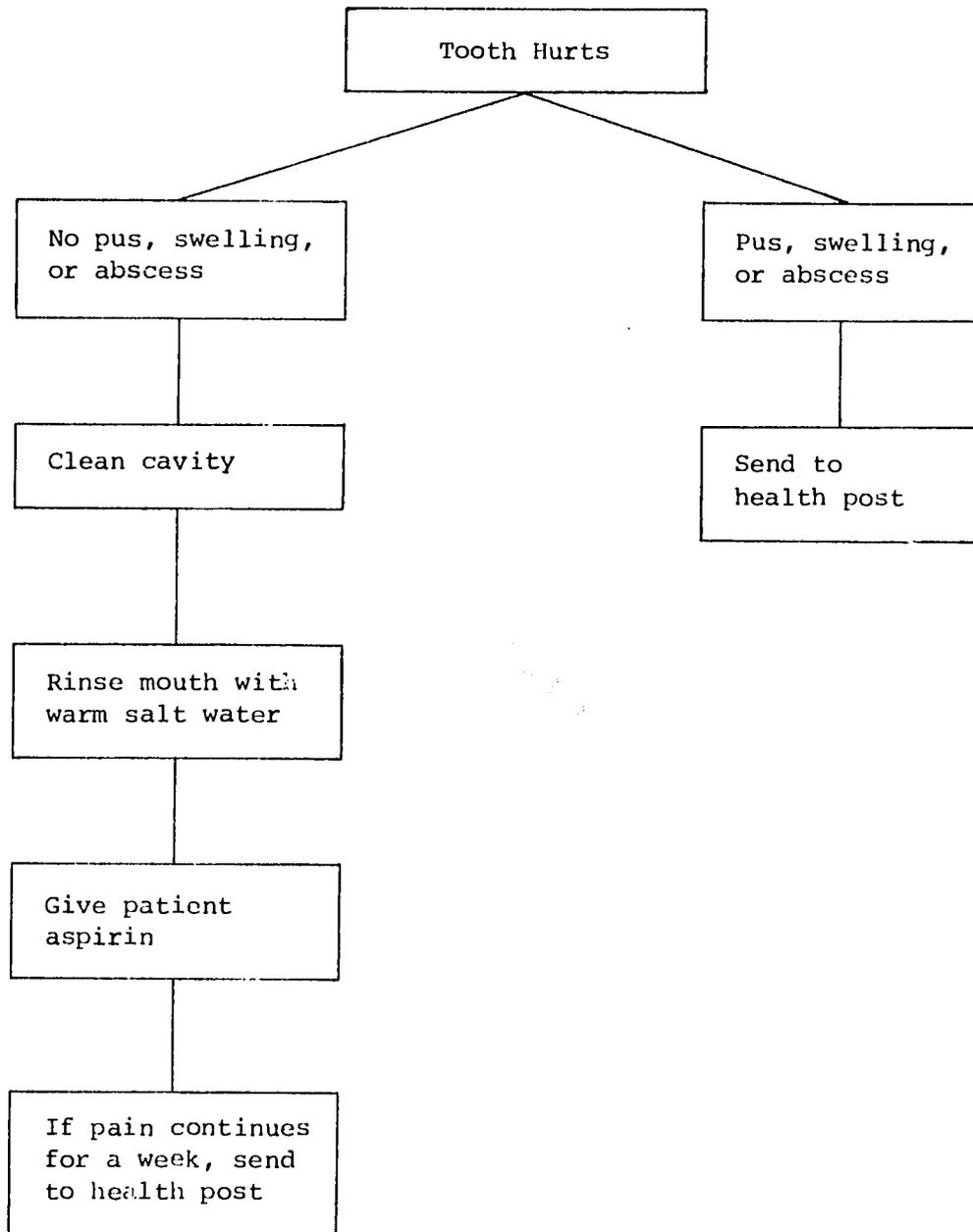
When villagers come to you with a tooth problem, it is a good time to teach them again about good health habits for the teeth. Tell them:

1. to clean and brush their teeth after every meal.
2. to remove any food which sticks between the teeth.
3. to eat good food, especially food from the protection-giving group: dark green leaves, oranges, tomatoes, and the like. Eating the right food helps keep your teeth healthy.
4. to avoid sweet foods and drinks. They help cause the teeth to rot.

To prevent cavities is better than to have your teeth pulled. If you care for your teeth, they will not have to be pulled. Practice good health habits.

KEEP YOUR TEETH HEALTHY:
BRUSH OFTEN & EAT GOOD FOOD.

Here is a summary of how to treat a toothache.



CONSTIPATION

Someone tells the Village Health Promoter that he has not had a bowel movement in a few days. Someone else tells the Village Health Promoter that he has pains when passing hard stools. These people have constipation. Normally, people have a bowel movement every day.

Constipation may not be serious, but it does make the person feel uncomfortable. In fact, when someone has mild stomach pain, he usually has constipation.

Constipation does not have to happen. Each person can easily prevent constipation by doing these three things:

1. drink much water, especially when the weather is hot.
2. eat many fresh fruits, vegetables, and grains, like wheat and rice, as well as other good foods.
3. exercise.

Tell your patients with constipation that these three things will prevent the constipation.

But if a patient has not had a bowel movement in three or more days or has stomach pains, then there is some medicine you can give. This is called a laxative. A laxative relaxes the stomach so a person can have a bowel movement. The laxative in your health bag is milk of magnesia. Give the milk of magnesia like this:

12 years and older	2-4 Tablespoons	at bedtime on the first night repeat, if necessary.
2 years to 11 years	1-2 Teaspoons	at bedtime on the first night repeat, if necessary.
Under 2 years	<u>DO NOT USE A LAXATIVE.</u>	Have the child eat plenty of fresh fruit.

Check the patient in three days. If the problem is not better after three days, send the patient to the health post.

CAUTION: Do not use a laxative if the patient has bad pain in his stomach. This pain could mean something more serious. Send the patient to the health post.

Some laxatives, like the milk of magnesia, are mild. Others are more powerful and can do more harm than good. Laxatives can also become a habit. And NO medicine should ever become a habit. So teach the villagers the three things which will prevent constipation.

REMEMBER:

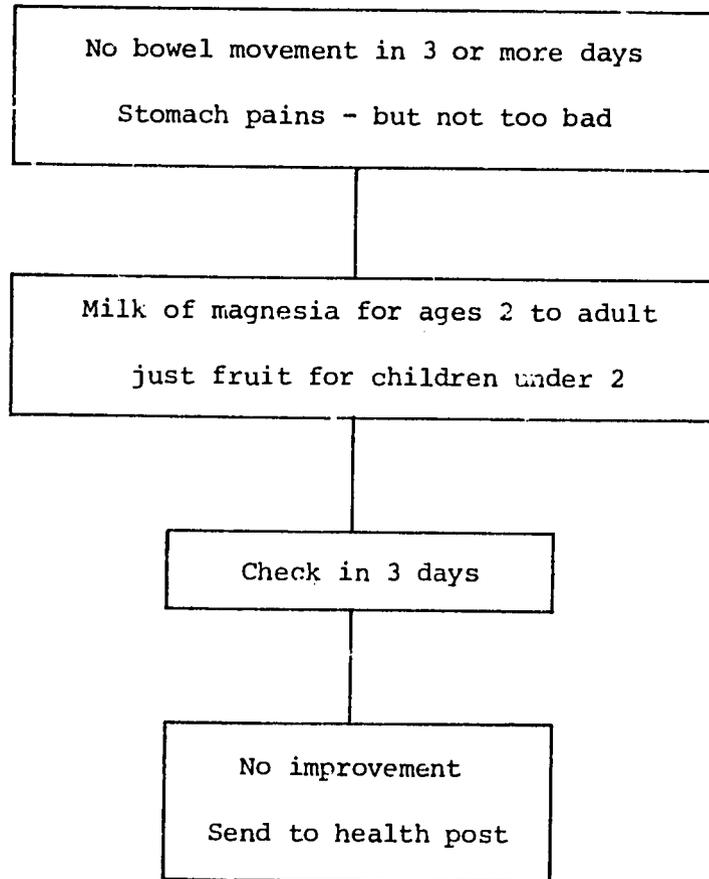
*Do not make laxatives a habit.

*Drink much water.

*Eat the right foods.

*Exercise.

Here is a summary of what to do for constipation:



WORMS

1. ROUNDWORM

2. HOOKWORM

1. ROUNDWORM

BACKGROUND

The roundworm causes problems in one part of the body called the intestine. Before studying about the worm, you need to know about this part of the body.

The food you eat has a path to travel inside your body. After you take a bite of food and chew it into small pieces, the food travels down a long food tube to the stomach. Here the food is made even smaller. From the stomach the food enters the intestine, a very long tube which looks like a curled snake. In the intestine two things happen to the food:

1. Useful food goes to all parts of the body to keep the body healthy.
2. Food that is not useful passes out of the intestine as feces.

The food you eat is for you. You need all the good things in it. But the worms like your food too. They live in the intestine, and they eat the food inside you. If a person has worms, he can become malnourished. If a person already has malnutrition when he gets worms, his malnutrition will become worse. Your food is too important to let the worms have it. This unit tells you about the worms and what is necessary to do away with them.



ROUNDWORM



Roundworm is a round and smooth worm with pointed ends. It is very long. It grows and lives in the body's intestine. How does the worm get inside the body? There is only one way for this to happen. A person must swallow the eggs of the worm. These eggs are found in feces. They are so tiny that you cannot even see them! Once the eggs are inside your body they hatch and grow into adults inside the intestine.

How can a person swallow these eggs? Like this:

1. From food or water poisoned with feces.
2. From hands dirtied with soil poisoned with feces.

Flies help carry these eggs when they land on feces that are left uncovered.

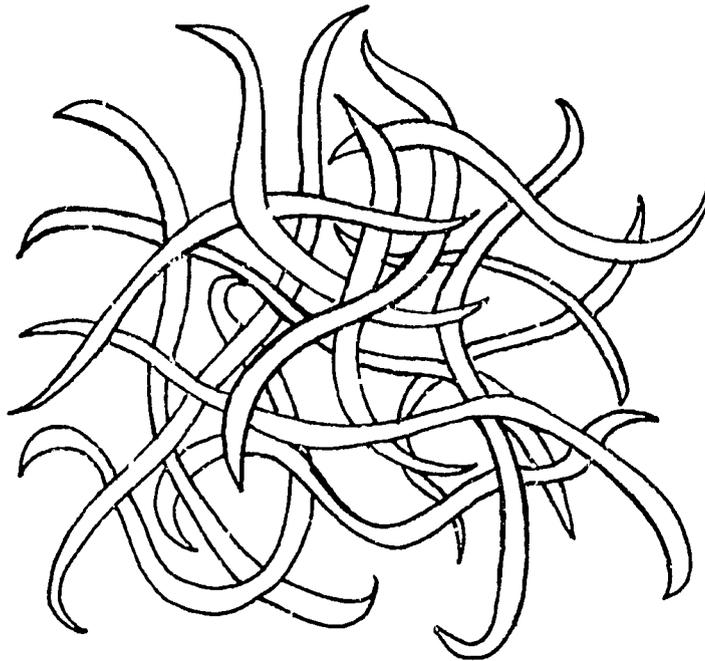


This food has been left uncovered.
The flies will make the food bad to eat.

SIGNS

What do you look for to see if someone has roundworm? You check for these signs.

1. Pain and swelling in the stomach.
2. Feeling weak and tired.
3. No desire to eat.
4. Becoming thin.
5. Diarrhea - sometimes.
6. Vomiting the worms - sometimes.
7. Passing the worms in the feces - sometimes.



Many roundworms together look like this.

TREATING ROUNDWORM

A Village Health Promoter can treat roundworms only if:

1. he has seen worms coming out of a patient's mouth or intestine, or
2. the patient tells the Village Health Promoter that worms have come out of the patient's mouth or feces.

If you do not have this information but you think the patient may have roundworm, send the patient to the health post.

The medicine to use for roundworm is Piperazine. It is a liquid. Before it is given to children, you must know their weight.

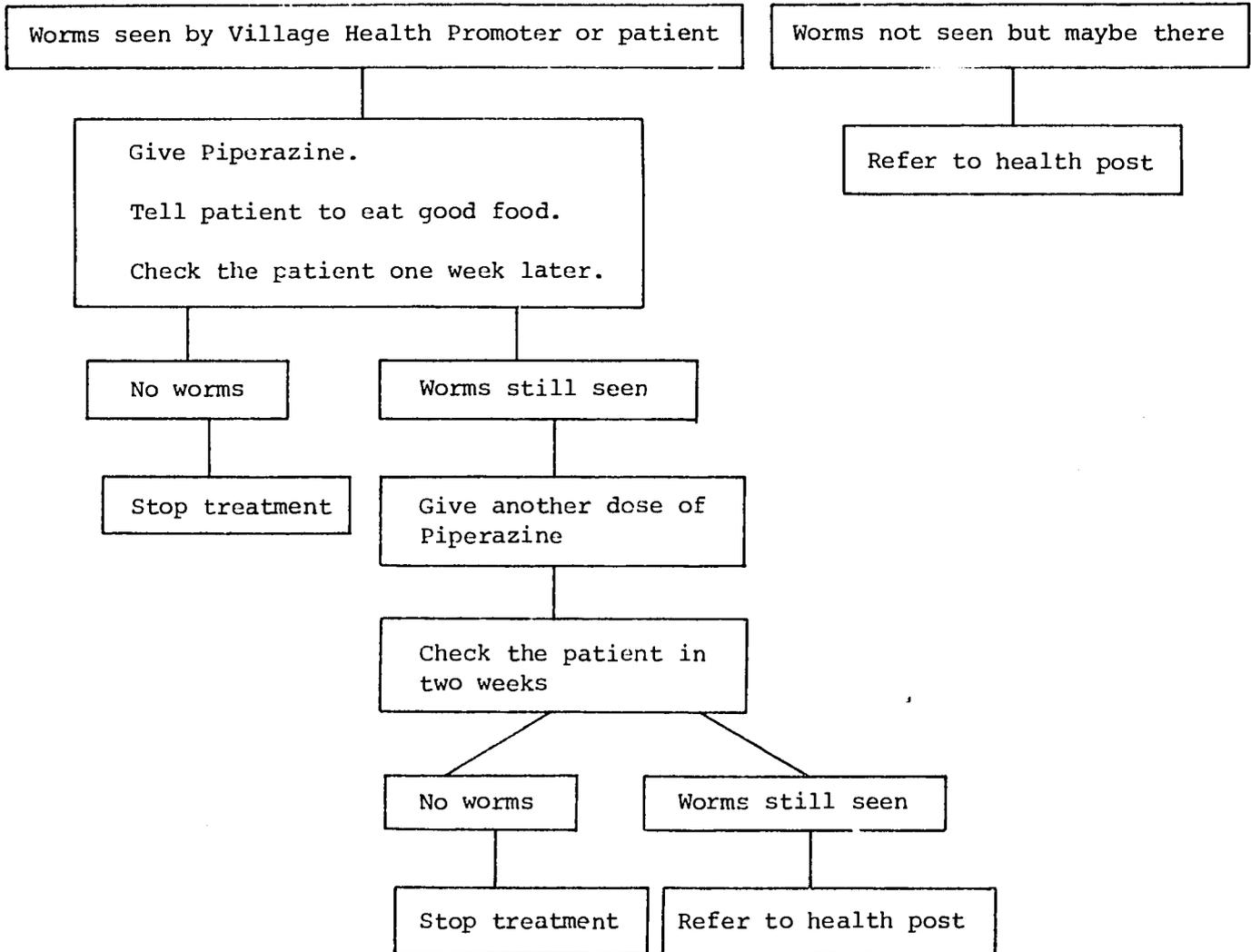
<u>AGE</u>	<u>LIQUID</u>
Adults	8 teaspoons
Children (20-35 kg.)	6 teaspoons
Children (15-20 kg.)	4 teaspoons
Children (10-15 kg.)	3 teaspoons
Babies (under 10 kg.)	2 teaspoons

The patient needs only one dose of the medicine. He is to take it in the morning before he eats. This should do away with the worms and their eggs. Tell the patient that the medicine will make the worms come out in the feces. This is all right. Be sure that the patient understands what the medicine will do.

Have the patient come back to you one week later. If he still has worms, give another dose. Check the patient again in two weeks. If he still has worms, send the patient to the health post.

In addition to the Piperazine, you must have the patient eat a lot of good food from all three food groups each day. The patient must eat even if he does not feel like eating. The good food will keep the patient strong. It will also help to keep the patient from becoming malnourished.

Here is a summary of what to do to treat roundworms.



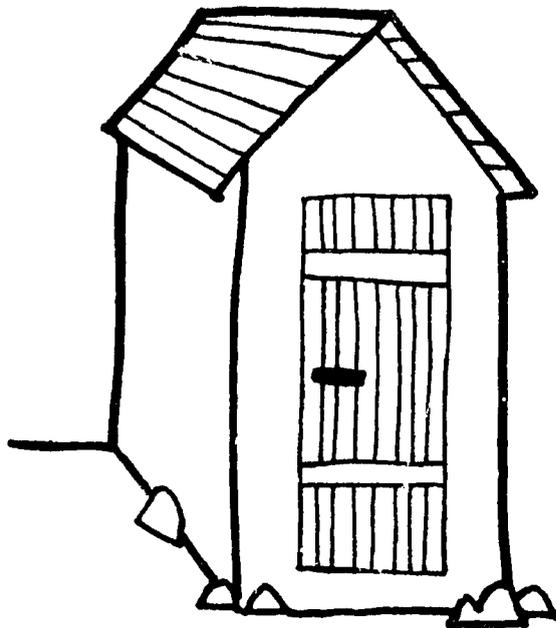
PREVENTING ROUNDWORMS

Once the patient is taking the medicine and eating the right food, the Village Health Promoter must teach the patient - and all the villagers - ways to keep from becoming sick. The Village Health Promoter must teach health habits. The health habits in the list below are like the ones you learned in the unit on Keeping Clean.

Once more you can see how something from an earlier unit can be used again in a new unit. The reason for this is that the different ways to good health are like each other. For example, when you plant and raise a crop, there are certain steps you must go through before the harvest. If you skip any of the steps, you will not have a harvest. So, too, if you skip any of the steps or ways to healthful living, you will not have good health.

Here are the steps or ways to prevent roundworms and have better health.

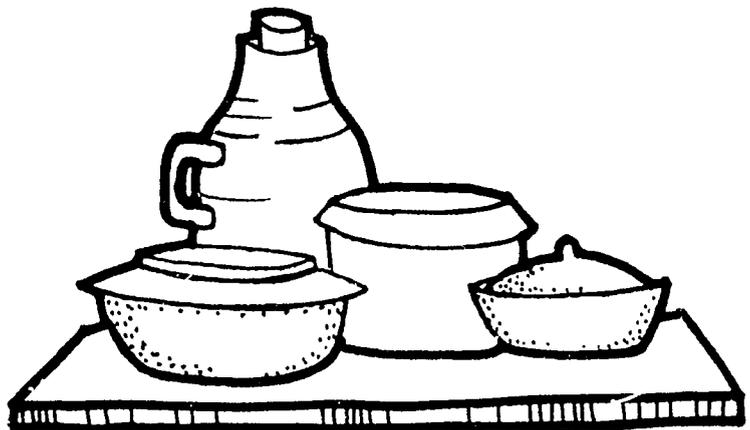
1. The most important step is to build and to use latrines.
2. If you cannot use a latrine, do what a cat does. Dig a little hole with your foot. Defecate or urinate into the hole. Cover with dirt by using your foot.
3. Wash hands with soap and water after you relieve yourself and before you handle or eat food.



4. Cut fingernails so that feces and the eggs of the worms do not have a place to stay.
5. Wash all fruits and vegetables with clean water. Cooking them also kills any eggs.
6. Boil all water.
7. Cover all food and store it in a clean, dry place - out of the sun.
8. Work with the school teachers. See to it that latrines are built near the school and used. See to it, also, that the school children wash their hands after using the latrines and also before they eat.



Boil water.



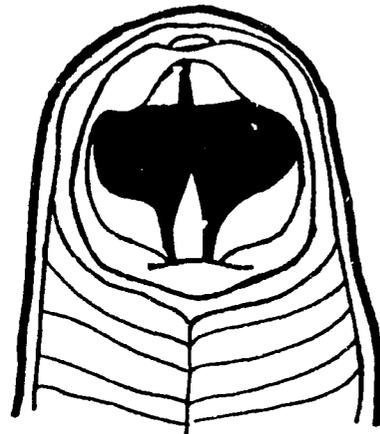
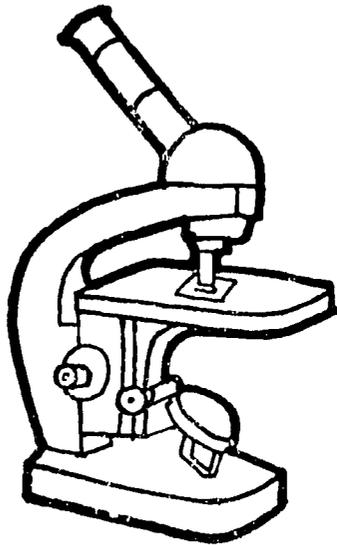
Cover food.

2. HOOKWORM

HOOKWORM



Another worm which commonly makes people sick is the hookworm. It is a very tiny worm which looks like a hook. You usually cannot see it. To get a good look at it you need to use a microscope. A microscope is a machine which makes small things look big. If you look at the hookworm under a microscope, you will see something special about the hookworm. It has little teeth.



When you look through the microscope, you can see the teeth of the hookworm.

What does the hookworm do with these teeth? Like the roundworm, the hookworm likes to live in your intestine. But the hookworm does not eat your food. Instead it drinks your blood.

How does the hookworm get inside your body? The hookworm comes in through the skin of the feet when someone steps on soil poisoned with feces or when he steps on feces with hookworm eggs in it. The hookworm then goes into your blood and moves along to the intestine. There it grows into an adult and sticks to the intestine. Then it drinks your blood.

The hookworm also lays eggs in the intestine. A person with hookworm passes these eggs out of his body in his feces. As a result, the disease continues to spread to other people.



This does not happen if people use latrines

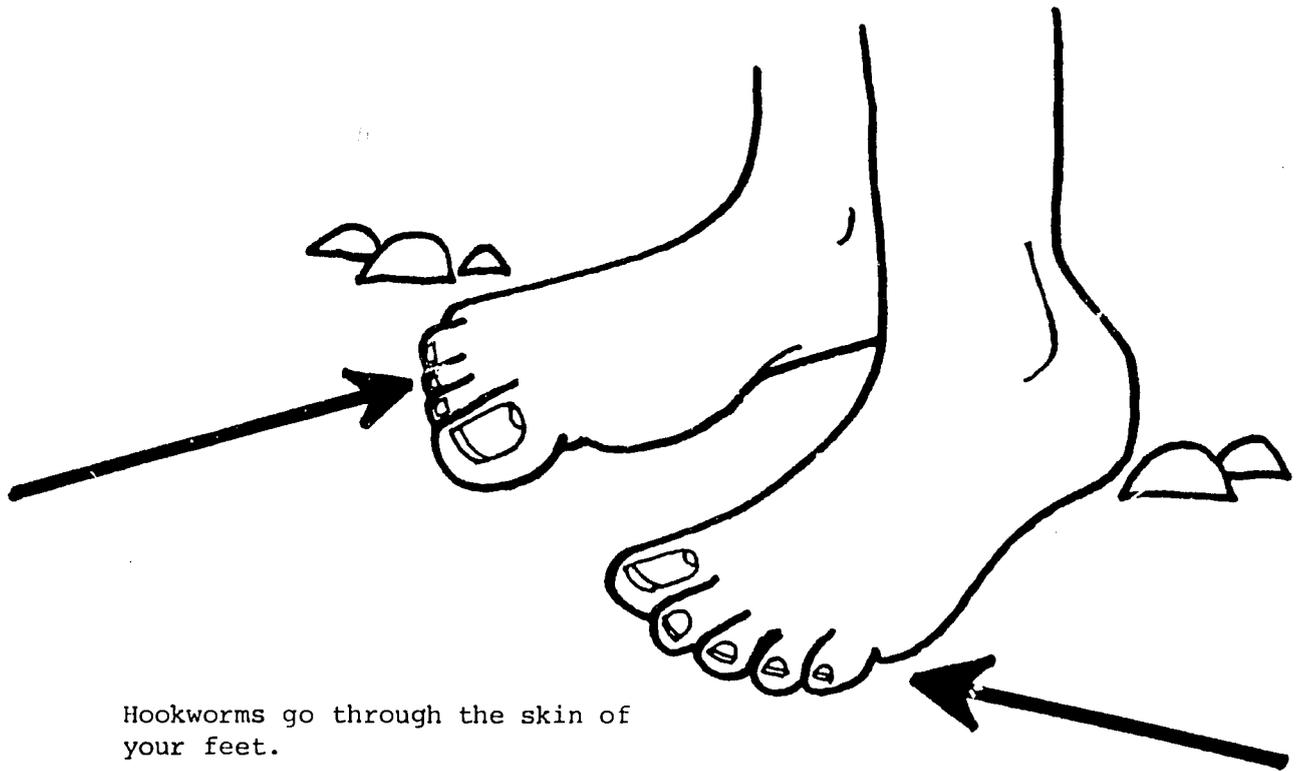
This child will get hookworm from playing in the dirt where someone with hookworm has defecated.

SIGNS

How do you know if someone has hookworm? You look for these signs:

1. The skin is pale and has little color.
2. The person feels weak and tired.
3. He has pains in the stomach.
4. He has blood in his feces.
5. He has diarrhea - sometimes.
6. His skin - especially between the toes - itches.
7. He may eat dirt.

If not treated, hookworms can cause serious problems which make you very sick. Why? Because if the hookworms are in your body for a long time they take the blood you need. One of the serious problems they can cause is malnutrition. If a person already has malnutrition when he gets hookworms, his malnutrition will get worse.



HOW TO TREAT HOOKWORM

Once you know that a person has hookworm, you can give the right treatment. There are two parts to the treatment.

Part I: Medicine

You must give the patient medicine. The medicine for hookworm is TCE. The TCE tablets are kept in a dark bottle in your health bag .

Here is how to give the medicine:

Adults	5 tablets
Children (40-50 kg.)	4 tablets
Children (30-40 kg.)	3 tablets
Children (20-30 kg.)	2 tablets
Children (10-20 kg.)	1 tablet
Children (under 10 kg.)	send to the health post.

The patient needs only one dose of the medicine. He is to take it in the morning before he eats. This should do away with the worms and their eggs. Tell the patient that the medicine will make the worms come out in the feces. This is all right. Be sure that the patient understands what the medicine will do.

Have the patient come back to you one week later. If he still has the worms, give another dose. If this does not work, send the patient to the health post.

Part II: Food and Iron Needs

Patients must help their bodies stay strong while they are sick. So it is very important that they eat the right food in the right amount. They must eat food from each food group at each meal every day. They especially need body-building foods. These things are discussed in the unit on food.

Patients with hookworm feel tired and weak. They also look pale. These things happen because the hookworm drinks their blood and takes away something called iron. Patients need iron for good blood so that they do not become too weak or tired.

How can you tell if a patient does not have enough iron? There are three ways:

1. Hold the patient's hand so that his palm faces to the sky. Gently bend the fingers back a little way. If the skin is not pink but white, then the patient does not have enough iron.
2. Look at the patient's fingernails. If they are not pink but white, then the patient does not have enough iron.
3. Gently pull down the lower eyelid of the patient. If it is not pink but white, then the patient does not have enough iron.

Just one of these ways will tell you that patients do not have enough iron. They must put iron back into their bodies.

Patients can get iron from dark, green foods like leaves, etc. While your patients eat these vegetables, the iron will go into their blood and make them strong again.



Green leaves have much iron
in them.

Iron from dark, green foods is usually enough. However, when a person has hookworm he needs more iron. So give the patients iron medicine.

Over 5 years: One tablet three times a day for three months.

5 years: One teaspoon five times a day for three months.

4 years: One teaspoon four times a day for three months.

3 years: One teaspoon three times a day for three months.

2 years: One teaspoon two times a day for three months.

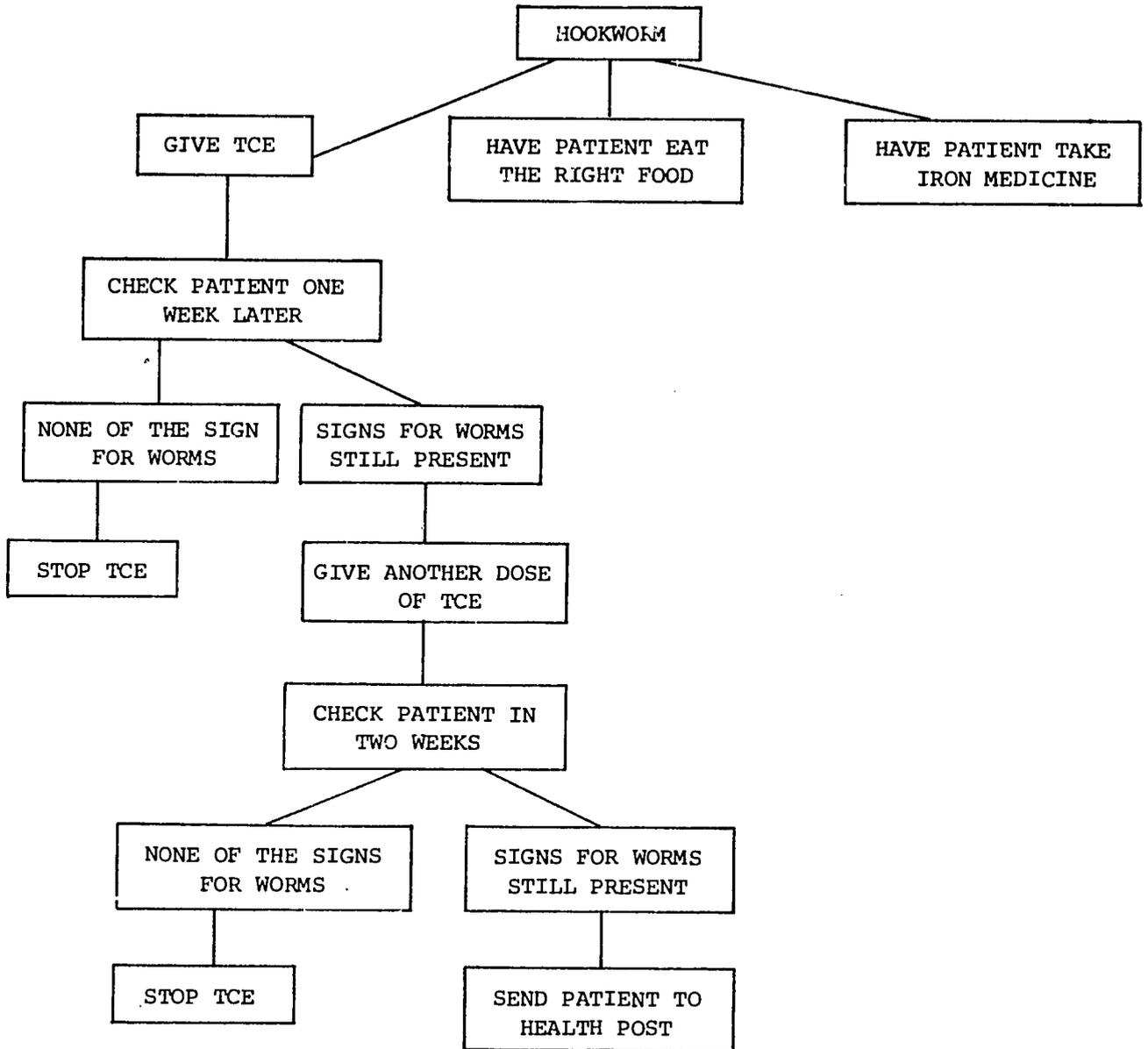
1 year : One teaspoon once a day for three months.

Under 1 year: 1/2 teaspoon once a day for three months.

NOTE: Never give the iron medicine for less than three months. Iron Medicine may make children vomit. Have them eat some food at the same time they take the medicine.

GIVE IRON MEDICINE FOR THREE MONTHS

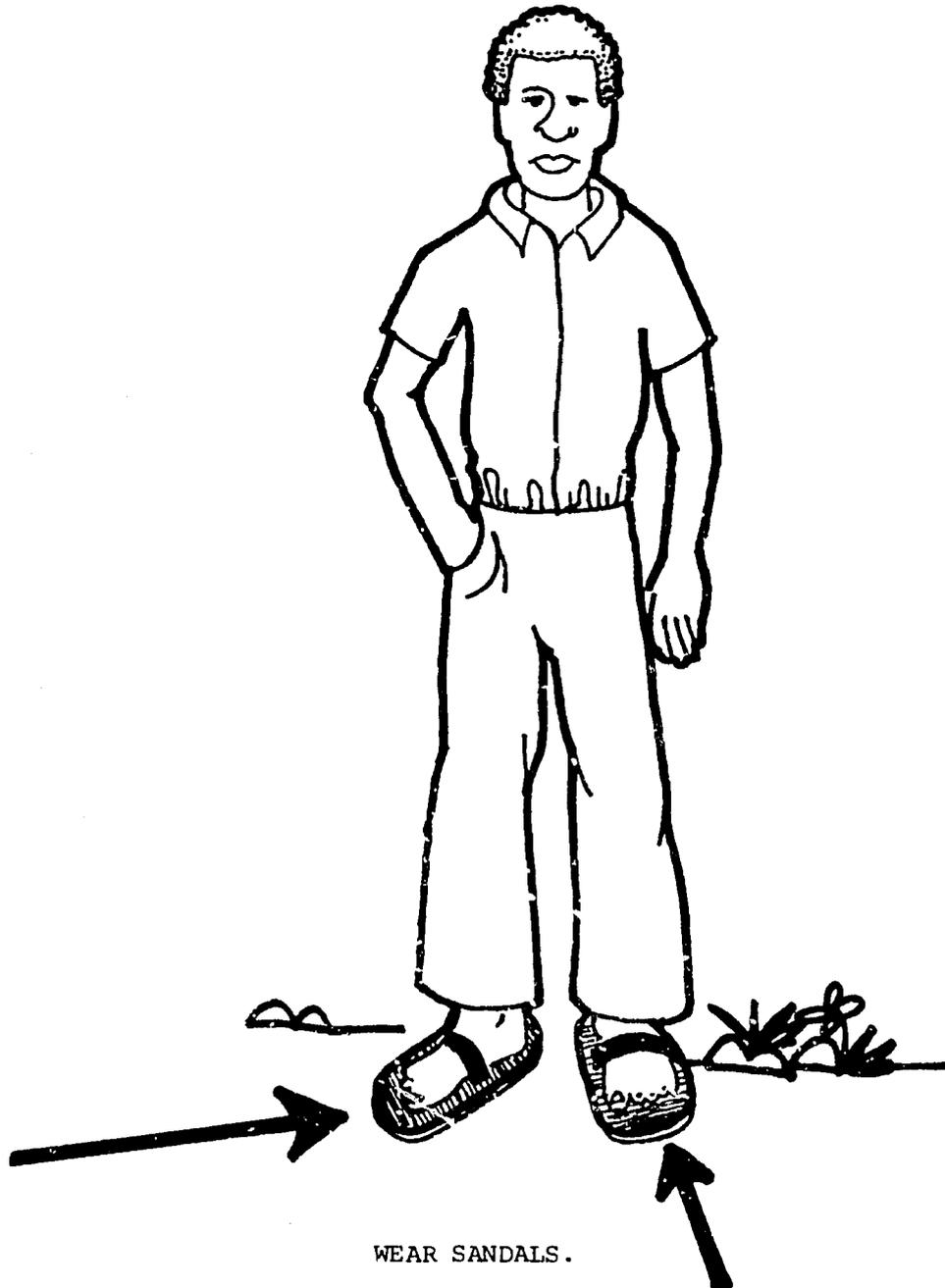
Here is a summary of what to do to treat hookworm.



PREVENTING HOOKWORM

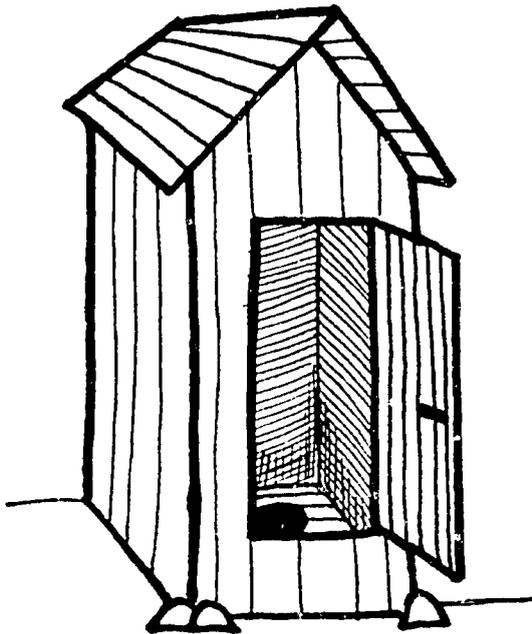
The patient is taking the medicine and is eating the right food. Now is the time for the village health promoter to teach good health habits once again. These health habits are the same as the ones used to prevent roundworm. In addition there are two other habits to teach:

- * Wear shoes or sandals.
- * If a person is barefoot, he should walk along paths where he will not step on feces.

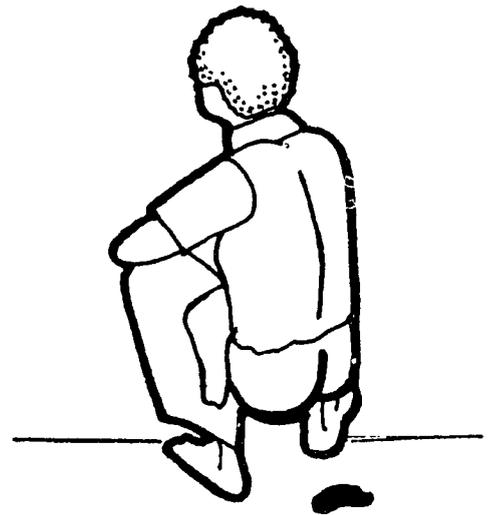


Here is a summary of health habits to teach the village:

1. Build and use latrines. If there are none, be like a cat.
2. Wash hands.
3. Cut fingernails short.
4. Wash all fruits and vegetables first.
5. Boil all water.
6. Cover all food, and store it in a clean, dry place.
7. Wear sandals or shoes.
8. When barefoot, walk along paths.
9. Work with the school teachers.



YES



NO

SCABIES

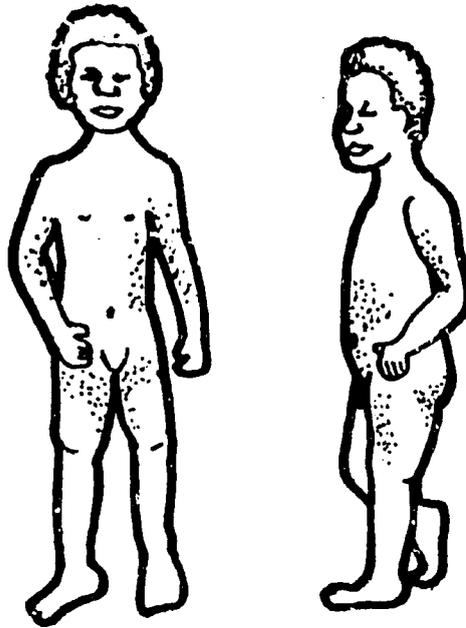
WHAT IS SCABIES?

Scabies is a disease of the skin caused by tiny bugs. These bugs dig into the skin where they like to live. They cause the skin to itch very much.

Scabies spreads when someone is close to people and things which are infected with the disease. Since many people often live close together in a small house, it is easy for scabies to spread. As a result, when one family member has scabies, always check the others even if they are not itching.



Scabies spread easily because many people must live close together in a small house.



These children have scabies. You can see the rash which causes the children to itch.

SIGNS

There are special signs which tell you that someone has scabies. They are listed below.

1. The person has a rash which looks like the rash in the picture
 - a. The rash is red and looks like little bumps.
 - b. The rash itches very much - especially at night.
 - c. The rash can be found on any part of the body.
2. The person itches so much that he does not sleep well, and he does not eat. As a result, he becomes thinner.
3. The scratching causes sores on the skin. These sores can become big problems.
4. You can easily tell scabies from any other skin disease, so suspect it first.

HOW TO TREAT SCABIES

There is a special treatment for scabies which uses the medicine, Kwell Lotion. There are seven steps to the treatment. It will kill the bugs and their eggs which cause scabies. The Village Health Promoter must teach this treatment to the patients.

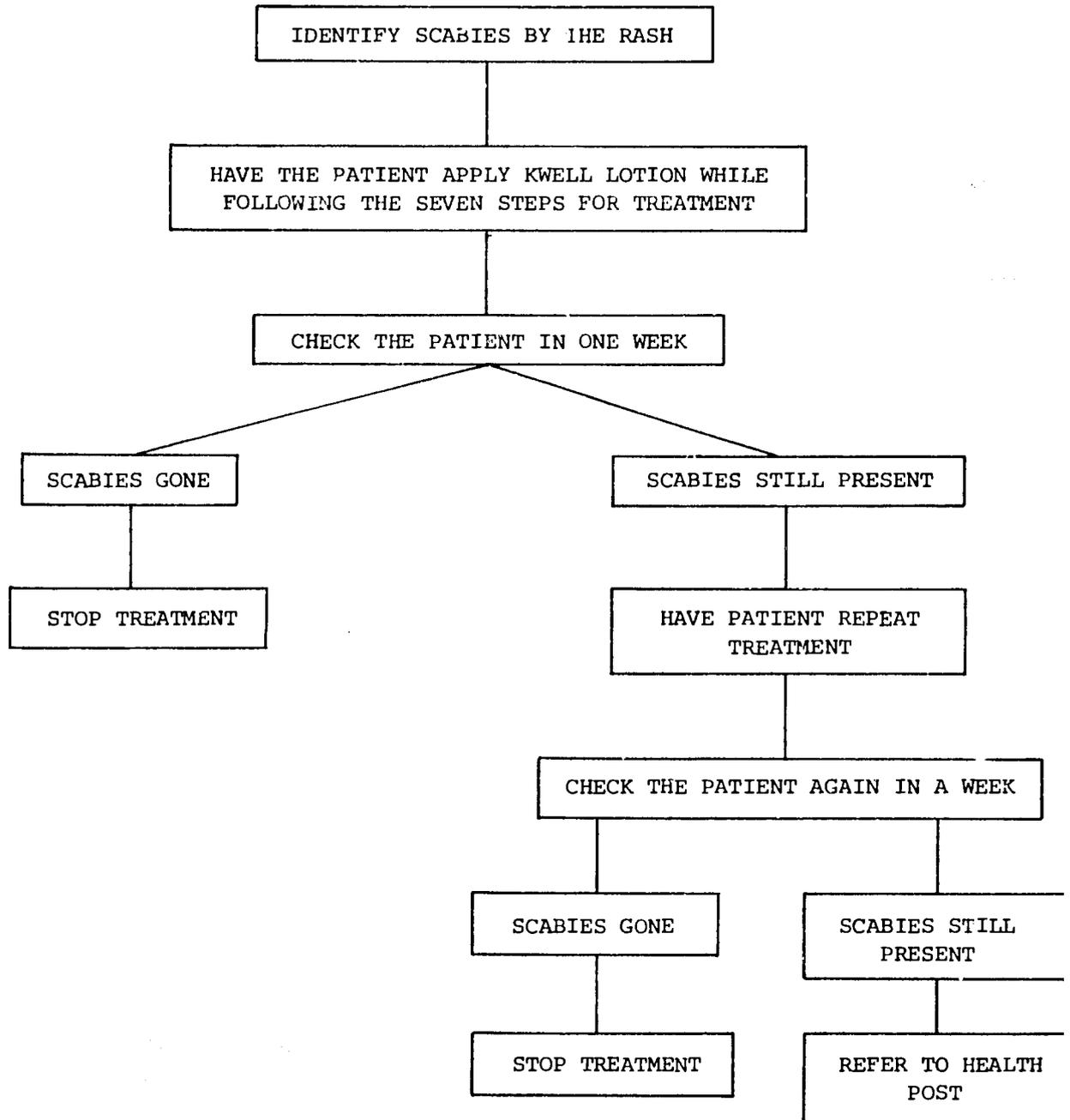
Here are the seven steps:

1. Wash the body in the morning with soap and water. Dry it.
2. Apply Kwell Lotion with a small, clean cloth to that part of the body which has the disease. Do not wash off the medicine.
3. Put on clean clothes.
4. Boil all dirty clothes and bedding.
5. Dry them in the sun.
6. At night before going to sleep, apply the Kwell Lotion again. Do not wash off the medicine.
7. On the next morning the patient should now wash his body again with soap and water.

Check the patient in one week. If the patient still has scabies, have him repeat the seven steps.

Then check the patient in one more week. If the patient still has scabies, refer him to the health post.

Here is a summary of what to do to treat scabies.



PREVENTING SCABIES

The best way to prevent scabies is to practice good personal and family health habits. These were listed in the unit on KEEPING CLEAN.

Below is a review of the health habits:

1. Wash your body with soap and water everyday.



2. Keep your hands clean and your fingernails cut short.



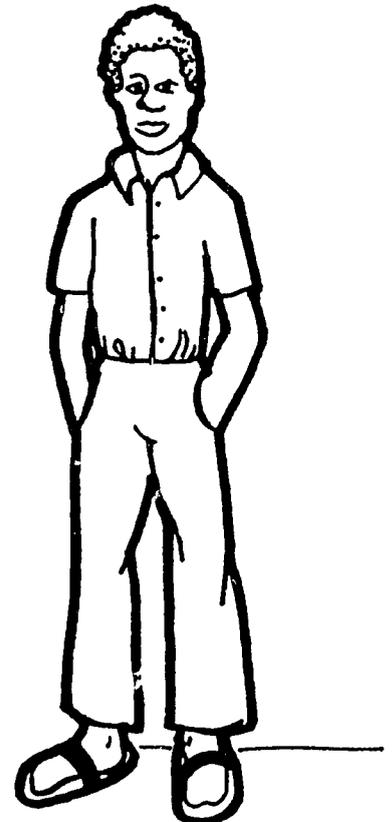
3. Wash your hair with soap and water once a week.



4. Wash your clothes and bedding often. Dry them in the sun.
Air the bedding often.



5. Put only clean clothes on a clean body.



VENEREAL DISEASE

WHAT ARE VENEREAL DISEASES?

Venereal diseases are illnesses which one person spreads to another person through the act of sexual intercourse. These diseases are serious and cause much pain. They can cripple a person or even kill him.

Since venereal diseases can spread very easily, it is important for you to do what you can to stop the spreading. But this can be difficult because most people do not want to talk about problems they relate to sex. They sometimes feel ashamed. So you must be patient with them. Let people know that they do not need to feel ashamed. Venereal diseases are only illnesses, and, like all illnesses, they must be treated. If treated early, venereal diseases are curable. So tell villagers to see you when they first think they have the signs of a venereal disease.

SIGNS

And what are the signs for venereal diseases? These are the signs for both men and women:

MEN

Sore on the penis.
Sore around the anus.
Pain when urinating.
Bad smelling pus dripping out of the penis.
Pain in the bag which hangs behind the penis.
Fever - sometimes (when the illness is severe).

WOMEN

Sore in the area of the opening of the womb.
Pain when urinating - sometimes.
Fever - sometimes (when the illness is severe).

There are few signs of venereal disease in women. And so it can be difficult to know whether they have a venereal disease or not. So you must tell women to see you if they notice any of the signs. There are tests which the health post can do to tell if someone has a venereal disease or not.

Another thing to remember about the signs of venereal disease is this: even without medicine the sores will go away. But that does not mean that the illness has gone away. In fact, the illness then becomes much more serious. So you must tell villagers to see you as soon as they notice one of the signs. If they wait, the illness will become worse.

TREATING VENEREAL DISEASE

If you think someone has a venereal disease send that person to the health post. If you have even the slightest doubt, send the person to the health post.

Since venereal disease can spread very easily through sexual contact, you must ask patients about anyone they have had sexual relations with during the last month. Then check those people, and refer all possible cases to the health post.

Asking people about their sexual partners is a very sensitive thing. You must explain in a very understanding way why you need this information. The reason is this: so someone else will not continue to spread the disease. Just explain that it is a curable illness if treated early and that anyone who has it must be treated. You must not make people feel embarrassed or uneasy because they have a venereal disease or because they have had sexual contact.

You would not make a mother feel bad when she comes to you with a malnourished child. So, too, you should not make people feel bad for having a venereal disease. Venereal disease is only one more illness that needs your care.

If the health post tells him that he has venereal disease, the patient will be given special medicine to take. Some patients will need to take their medicine for a long time - sometimes a month. At first when a person starts to take his medicine, he may feel better immediately. He will stop his medicine. But he must take all his medicine as directed by the health post if he wants to become well.

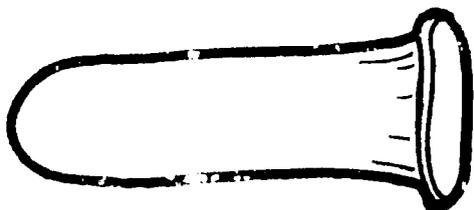
So to be sure that patients are taking their medicine, you must check them every week. At this time, tell the patients how important it is to take the medicine for as long as the health post says. You must also tell them that they may indeed feel better soon after beginning the medicine. But the disease is not really cured. If they stop the medicine, the disease will come back even more serious than it was before.

If a patient will not take his medicine even after you have explained why he should, then tell the health post. Someone there will then check on the patient.

HOW TO PREVENT VENEREAL DISEASE

Since venereal disease spreads easily through sexual intercourse, the best way to prevent venereal disease is to stop having sexual intercourse. But this does not always happen.

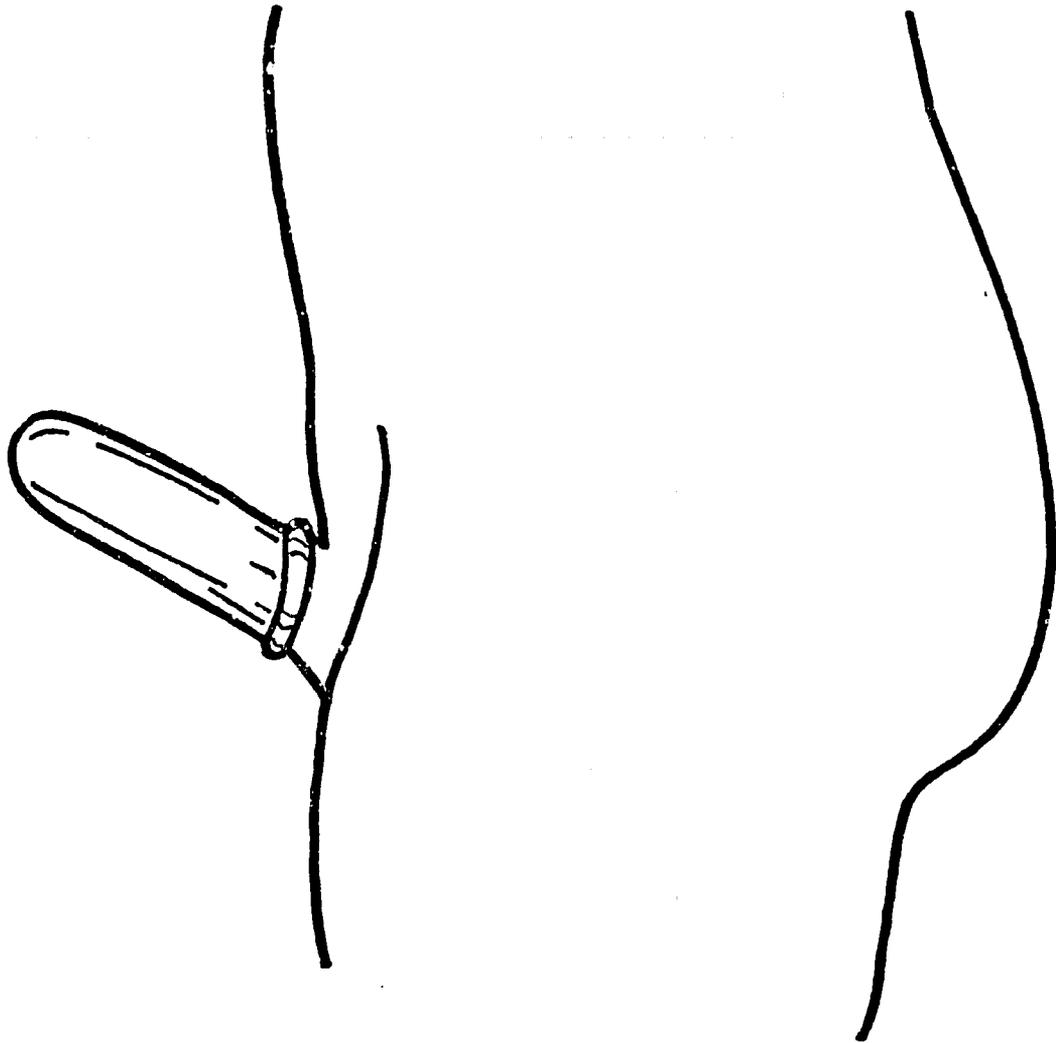
Another useful way to keep venereal disease from spreading is to use something called a condom. A condom is a thin bag which looks like this:



A man puts it onto his hard penis before the sex act. The condom catches the sperm and any germs of a venereal disease. As a result,

no germs can get inside a woman from a man, and no germs can go from a woman to a man.

How does a man use a condom? Like this: A man unrolls a condom onto an erect penis. He leaves a space at the tip to catch the sperm. The man is always careful not to make a hole in the condom or else it will leak and won't work.



When a man takes his penis out of the woman, he must also be careful. The penis should be removed shortly after the sex act while it is still hard. The man must hold the end of the condom so that it does not slip off. He then removes it and throws it away. Afterward he washes his penis and his hands.

A condom can be used only once.

VENEREAL DISEASE IS A COMMUNICABLE DISEASE

Before you finish this unit, you must learn one more thing about venereal disease. Venereal disease spreads from one person to another. It spreads only by direct contact with another person. It does not spread by contact with some bug, for example. A disease which spreads directly from one person to another is called a communicable disease.

Venereal disease is not the only communicable disease. There are others. You have not studied them, but you have heard about them. Two of these other communicable diseases are tuberculosis and smallpox.

Sometimes communicable diseases spread very fast from one person to another. Many, many people get the disease. When many people in your village catch the same communicable disease at approximately the same time, then your village has what is called an outbreak of the disease.

If there should be such an outbreak of a communicable disease in your village, tell the authorities at the health post. Special things need to be done to stop the outbreak. You, the Village Health Promoter, will be called upon to help do these special things. You will be protecting the health of your fellow villagers even more than you have so far.

WHAT TO TEACH THE VILLAGE

Since people can be shy or embarrassed when talking about sexual relations and venereal disease, the Village Health Promoter must be understanding and patient when he teaches. Here is a list of what to teach the village:

1. the facts about venereal disease.
2. what condoms are, why they are used, and how they are used.

CONCLUSION TO HEALTH PROBLEMS

You have now studied many health problems and how to treat them. There are still two more important things to know about treating all these health problems.

The first thing is about medicine. Be sure to tell the patients that they should take their medicine only as they are told. They should not take less. They should not take more. Too much or too little medicine can be harmful. Also tell the patients to keep all medicines in a place where children cannot get the medicines. If children were to eat these medicines, they would become very, very sick. They could even die.

The second thing is about referring to the health post. When you cannot treat a health problem, you have been taught to refer the patient to the health post. Very often the health post will give the patient medicine to take. The health post will also tell you what the medicine is as well as when and how often the patient needs to take the medicine.

You must check on the patient to be sure that he is taking the medicine and in the way he was told at the health post. If the patient is not doing this, find out why. If the patient does not understand what he is to do, tell him again. Be sure that he understands. However, if he has no reason for not taking the medicine or if he stops the medicine after you have again explained what he is to do, tell the health post. Then someone from the health post can check the patient.

UNDER-FIVES CLINIC

INTRODUCTION

Early in this book you learned that children under five have special health problems and become sick very easily. You must give children your attention and help because the future of the village needs strong, healthy children.

This is why it is important for you to organize a program which helps young children. This program is called an under-fives clinic. Here you check whether a child is growing, identify and treat childhood diseases, teach about food, and perform other duties which pertain to the health of the child.

Do you think that an under-fives clinic sounds like a place where you practice most everything you have learned so far? If you think so, then you are right. Yes, an under-fives clinic gives you the chance to use - in one place and at one time - your knowledge of health habits, health problems, and health education.

Tell the villagers about the under-fives clinic and why you are organizing it. Also tell them that it is held once a month - on the same day each month so they can make plans to attend.

ORGANIZING

A. Things you will need for an under-fives clinic:

1. A portable scale for weighing the children.
2. Road to health cards with plastic envelopes.
3. A large flannelgraph of the road-to-health card.
4. Posters and visual aids you may use.
5. Food and cooking utensils for any food demonstration.
6. Your health bag.

B. Things you do at an under-fives clinic:

1. Organize. Before the mothers come with their children, set up all the equipment you use: the scale, flannelgraph, food, and anything else you will use.
2. Prepare. Plan a brief talk to the mothers about food, the importance of keeping clean, good health habits, etc. A very important thing to talk about is the road-to-health card. All the mothers must understand its importance. So you must explain it very thoroughly to the group as often as you can. Call upon mothers who understand the card to help you explain it. If any mother is having trouble understanding the card, explain it to her separately.
3. Give a card and plastic envelope to the mothers for each of their children. Tell them to bring the card each month. Also tell them to keep the card in the envelope so the card stays clean and is not lost.
4. Fill in a card for each child.
5. Weigh each child.
6. Record the weight on the card. Follow the instructions in the food unit.
7. Praise the mother for any weight gain.
8. Encourage and counsel a mother whose child is not gaining weight.
9. Very carefully watch a child who has a borderline case of malnutrition.
10. Examine the child for any of the illnesses you have studied.
11. Treat those illnesses in the way you have been taught.
12. Tell the mother what day she is to return.

C. Helpful tips.

1. You need only weigh the children once a month. But the day for the weighing should be the same day every month. If there are many children in the village, then you will need several days a month for weighing. But the mothers only need to bring their children once a month.
2. After you have weighed the children, you are to give talks about health. This is the time to use the audiovisual aids you have made. It is also time to teach the mothers about food, diarrhea, cleanliness, and so forth. You can teach the things that are suggested at the end of the units.
3. You are also to organize cooking demonstrations. Teach the mothers about the three food groups and ways to use all the food that is available locally. Follow the suggestions in the unit on food. Have the mothers take an active part in these demonstrations - especially the mothers of undernourished children.
4. The most important thing is the weighing of the children and recording the weight on the weight-for-age cards. These cards show whether a child is growing strong and healthy. The mothers must understand this and bring their children to be weighed. Do everything you can to encourage the mothers to bring their children to the under-fives clinic and to follow your advice for improving the health of their children.

**B. SUGGESTED UNITS FOR
ADDITIONAL TRAINING**

FRACTURES AND SHOCK

WHAT IS A FRACTURE?

Have you ever heard of someone who fell out of a tree and broke his leg? Have you heard of someone who fell from a truck and broke his arm? When a person breaks one of his bones, we say that he has a fracture. In other words, a fracture is a broken bone. A fracture is very common in the arms, legs or ribs. But fractures can occur in other parts of the body too.

How can you tell if a person has a broken bone? By the signs. There are certain signs which tell you if a person has a fracture. Here are some of them:

1. The injured person may not be able to move that part of the body which is broken.
2. Pain is present. Sometimes a person can be so excited that at first he may not feel the pain. But if he moved, he would feel the great pain.
3. The skin of the area of the fracture is also very tender and will hurt if touched.
4. The area of the fracture becomes swollen.
5. The bones may be out of place. Your teacher will show you examples.
6. The area of the fracture may turn purple.
7. Muscles in the area of the fracture tighten up and feel hard.
8. The fractured part of the body is moved into positions which it normally does not move. For example, a finger can be bent so that it faces in the wrong direction! Any movement causes the greatest pain.

Not every person who falls, trips or bumps himself gets a fracture. The injury may not be so bad as to break a bone. Instead a person may have only a bruise or a sprain. These are painful too but not as painful as a fracture. In addition, a person can still move a bruised or sprained part of the body.

If a person has fallen hard, complains of great pain and cannot move the injured part, he most likely has a fracture. If a person has bumped himself or tripped, he usually has only a bruise. His skin will turn purple at the bumped site for certain. If a person has turned or twisted his ankle or wrists, he usually has a sprain. A sprain happens most commonly at the ankle or wrist.

Often it can be impossible to tell whether a person has a bruise, a sprain or a fracture. The Village Health Promoter should treat every injury to a bone as if it were a fracture.

SHOCK

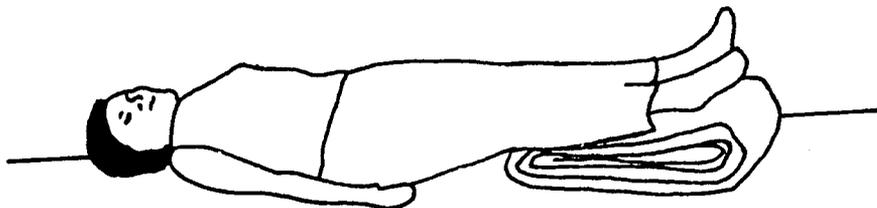
Before you learn how to treat a fracture, you need to know how to treat shock. Shock happens when a person is very badly hurt from a fracture or from any other injury. His eyes may look glassy and shiny. He may breathe very rapidly or with difficulty. His skin may feel cool and clammy. He may even sweat too. His lips may become pale or turn blue.

Before doing anything for the fracture, you must first take care of the shock. Here are some things to do to help:

1. Have the person lie down on his back.
2. Remove any wet clothing.
3. Cover him with a blanket or something like that. See drawing #1. Do not make the person so hot that he sweats. Cover him just enough to keep him from losing body heat.

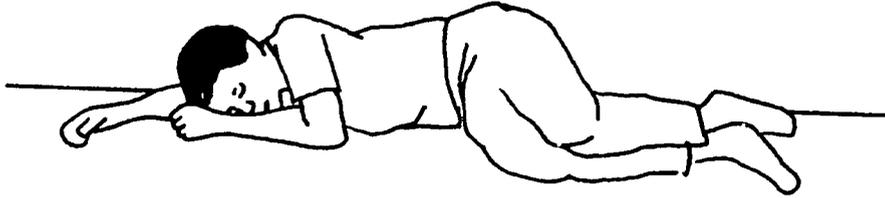


4. Raise the person's feet off the ground or floor a little. Use a stone, a small stool, a folded blanket or something like that. See drawing # Do not keep the feet raised if this position causes pain or difficult breathing. (DO NOT raise the feet if there is a head or chest injury!)

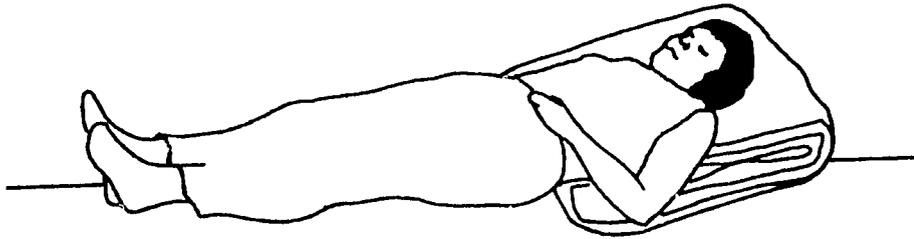


5. Place a person on his side if the person is:

nauseous or vomiting
bleeding from the mouth
not conscious
injured in the face or throat
See drawing #3



6. A person with a chest or head injury should be on his back with his head and shoulders raised. Use this position if the person is having great difficulty breathing. See drawing #4. A person with a head or chest injury must NOT have his head lower than the rest of his body.



7. Do not have the person drink any liquids if he is:

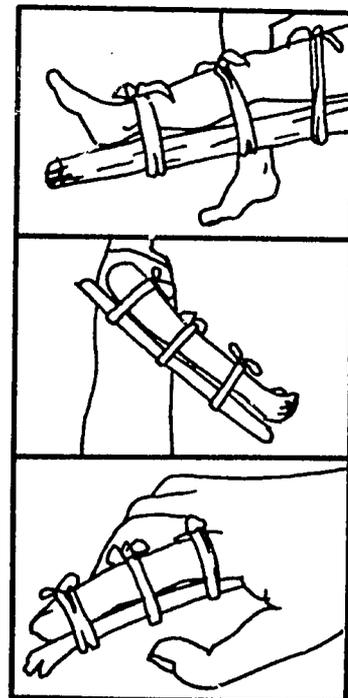
not conscious
nauseous or vomiting
having convulsions
having difficulty in swallowing.

REMEMBER: TREAT SHOCK FIRST AND THEN THE FRACTURE

FRACTURED LEGS, ARMS AND FINGERS

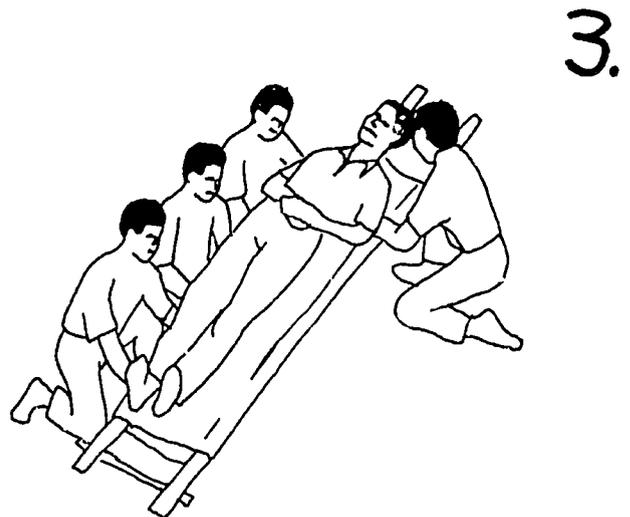
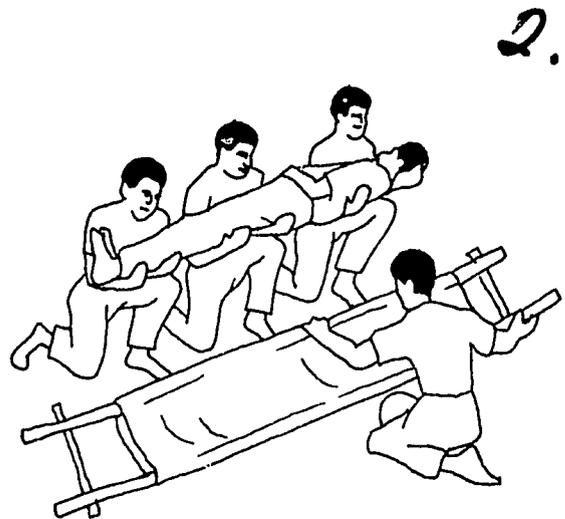
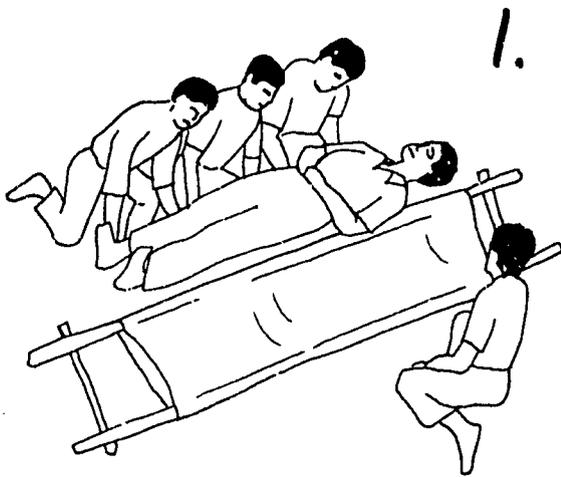
Now that you have treated shock, here is what to do if you think someone has a fracture of the leg, arm or finger:

1. See if there is a wound along with the fracture. If there is a wound such as torn skin where you can see the bone, then treat the wound first. You must treat the wound first. Here is how to do it:
 - a) Be sure everything you do and use is as clean and free of germs as possible.
 - b) Wash your hands before beginning.
 - c) Keep away flies.
 - d) Pour iodine over the wound.
 - e) Place a sterile gauze pad over the cut in the skin. Be very careful not to let your hands or anything else touch that side of the gauze which will touch the wound.
 - f) Hold pad firmly in place using pressure from your hand.
 - g) Wrap tape around the pad tightly so that the pad will stay firmly in place against the wound without your help.
2. Fix the fracture in such a way that the broken body part cannot move. It is very important not to move the fracture or it may become worse.
 - a) Take any strong material such as a board, bamboo or tree branch.
 - b) Tie it to the fractured area with tape or cloth in at least three places.
 - c) If the bone is bent out of shape into a different position than it should be, put the board on in that different position. DO NOT try to put the bone back into its usual position.
3. Give aspirin for the pain.



4. Have the patient drink much good, clean water or some other liquid. Remember: no liquids for some people who are in shock.

5. Carry the patient quickly to the health post on some strong material. Use the method pictured below. You must do this without bending or moving the patient's body, especially the body part that is broken.

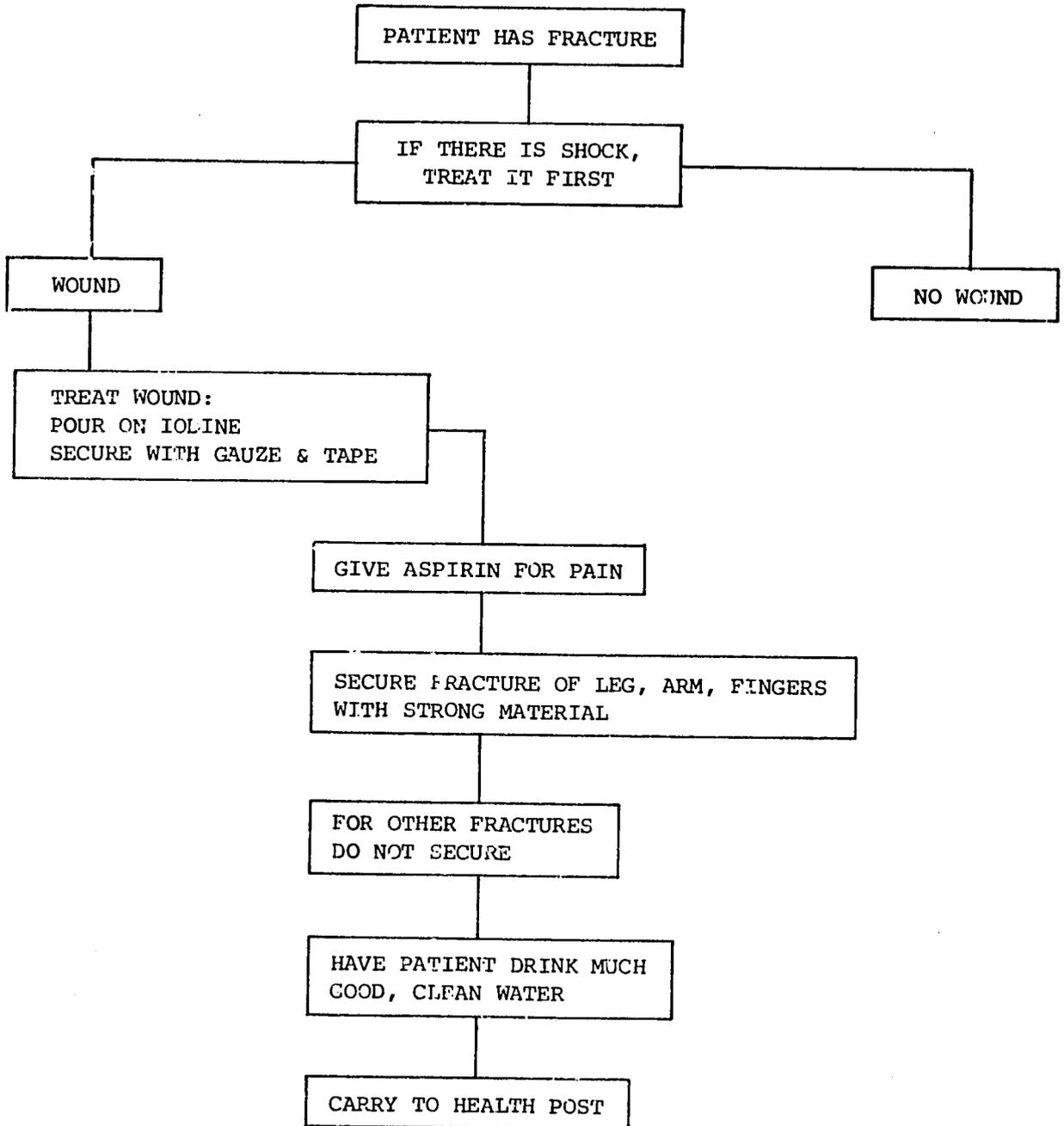


FRACTURES IN OTHER PARTS OF THE BODY

Here is what to do if another part of the body is broken such as the chest, back or head.

1. Give aspirin for the pain.
2. Carry the patient immediately to the health post. Use the method pictured on the previous page.
3. Move the fractured part of the body as little as possible. It needs to rest. It should not be disturbed.

Here is a summary of how to treat a fracture.



**INJECTIONS
AND
IMMUNIZATIONS**

Learning how to give an injection is an important skill for the Village Health Promoter. It is something which takes practice. Your teacher will show you how to give injections and teach you other things you need to know about them. Your teacher will also give you time to practice and will supervise your practice. Then you will know if you are giving injections correctly.

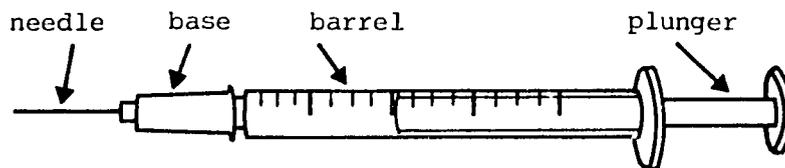
This unit is a review of your teacher's demonstrations. This unit will help you when you need to check if you are doing everything right.

What does it mean to give an injection? It means that you are putting some medicine into part of a person's body.

Why would you do this? There are several reasons. Here are two:

1. because some medicines have to be given in this way.
2. because immunizations (or vaccinations) usually are given in this way.

What do you use to give an injection? To give an injection, you need a syringe which has a needle on the end. This picture shows you the parts of the syringe and the needle.



STERILIZING THE EQUIPMENT

Before you can use a syringe and needle, you must be sure that they are sterilized. "Sterilized" means that there are no germs present. To kill all the germs on the syringe and needle, you must boil them in clean water.

Here are the steps to take to sterilize syringes and needles.

1. Wash the syringes and needles with soap and water. Use the fine cleaning wire to clean inside the needles. If you soak used syringes and needles in cold water immediately after you use them, they will be easier to clean later.
2. Rinse with much good, clean water.
3. Separate the needles from the syringes.
4. Fill a clean pot with good, safe water.
5. Place all the pieces into the pot of water. Be sure the water covers all the pieces.
6. Cover the pot and boil between 5 and 10 minutes. Do not start measuring the time until the water is in a hard boil.
7. Remove the pieces with either:



tweezers

or

forceps

The tweezers or forceps must already have been sterilized themselves!

8. If you do not have tweezers or forceps, drain the water. Then use your washed and clean hands to remove the pieces. But do not touch the tips of either the needles or the syringes!

If you do not use the syringes and needles immediately, then you may store them in a pan with a lid which you have already sterilized. This storage pan should contain enough alcohol to cover the needles and syringes. Use the tweezers or forceps to remove the pieces from the alcohol when you need to use them.

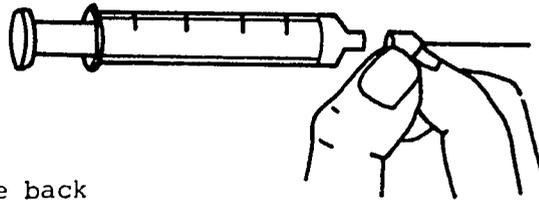
PREPARING FOR AN INJECTION

Once the needles and syringes have been sterilized, you are ready to give an injection. Here are the steps in words and pictures.

1. Be sure your hands are thoroughly clean. Then wipe them off with alcohol.



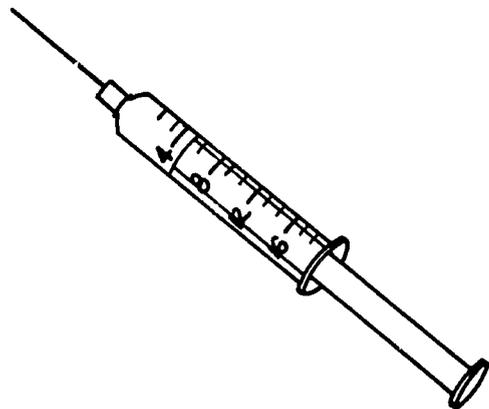
2. Clean very well the rubber top of the medicine bottle with cotton soaked in alcohol.



3. Put the syringe and needle back together. Touch only the base of the needle as you put it onto the syringe.

Did you store the needle and syringe in alcohol? If so, after you have put them together, move the plunger a few times so as to remove any alcohol inside. You do not want to mix the medicine with any alcohol. If you do, you will weaken the medicine and maybe add germs to the medicine too! Do not mix alcohol with the medicine.

4. Check to see how much liquid is needed. Pull the plunger out to that same number on the barrel of the syringe. In this picture, the plunger has been pulled out to ".5"

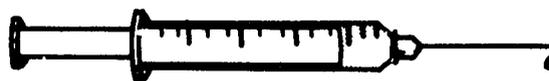
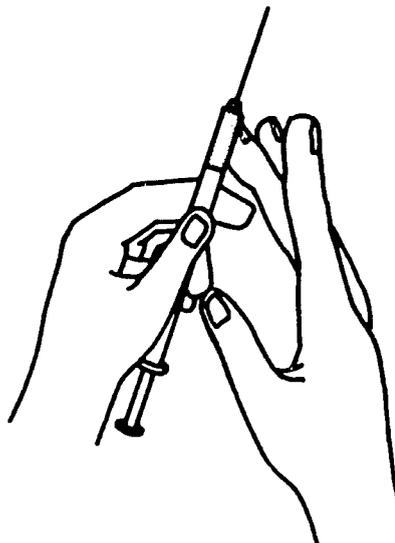


5. Turn the bottle upside down. Carefully insert the needle through the center of the sterilized rubber stopper and into the bottle. Then push the plunger all the way in to pass air into the upper space in the inverted bottle.



6. Be sure that the tip of the needle is well below the surface of the fluid in the bottle. Then gently pull the plunger back to the number which indicates the amount of the dose to be injected.

7. Be sure there are no air bubbles. Remove them by tapping the side of the syringe with your finger.
8. When there are no air bubbles and when the syringe is filled with the right amount of liquid, remove the needle from the bottle.



Take very special care not to touch the needle with anything - not even with cotton soaked in alcohol. If the needle touches your fingers or other things, you MUST THROW OUT the liquid in the syringe. You must then boil the needle and syringe again or use another sterilized needle and syringe.

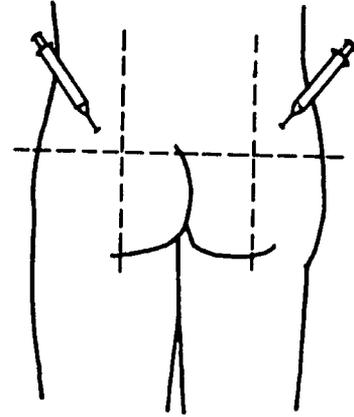
You may rest the barrel of the syringe on cotton soaked in alcohol. But be sure the needle itself does not touch anything. The picture below shows you how.

As you can tell, BE VERY CAREFUL!

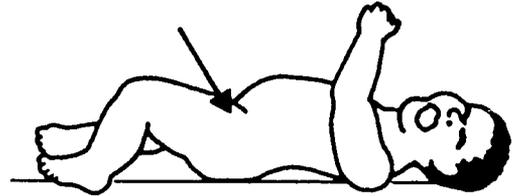


GIVING THE INJECTION

The best place to give an injection is in the buttock. There will be less pain here. The drawing shows you where on the buttock. (If an adult will not take an injection in the buttock, give the injection in the adult's arm.)

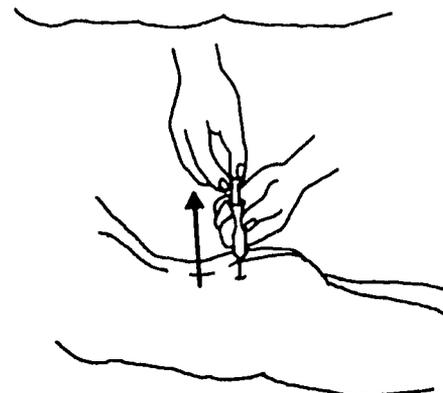
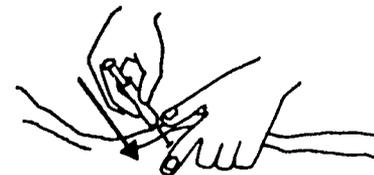
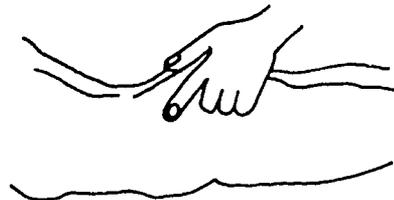
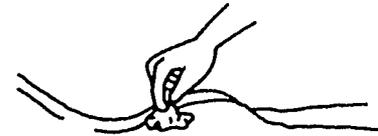


If a child is under two years of age, do not give an injection into the buttock. Instead use the thigh. The drawing shows you where on the thigh.

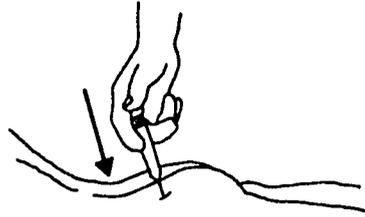


Now you are ready to give the injection. The steps are in words and pictures.

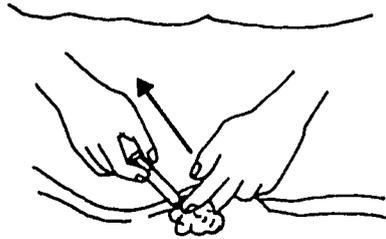
1. Soak a cotton ball in alcohol. Scrub the skin vigorously all around where you will insert the needle. Let the skin dry.
2. Place your thumb and forefinger on either side of the spot for the injection. Slightly stretch the skin to be sure that it is smooth.
3. Very quickly insert the needle straight into the skin.
4. Remove your thumb and the forefinger from the skin. Hold the syringe and needle firmly in place with one hand. With the other hand gently draw back on the plunger. You are checking that the needle has not gone into a blood vessel. If it has, then blood will appear in the syringe. If this happens, remove the needle from the skin. Then throw out the liquid in the syringe and start with another sterilized needle and syringe.



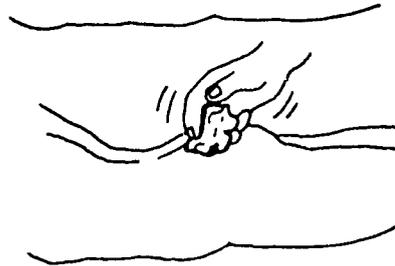
5. If there is no blood, slowly push the plunger so the liquid will go in.



6. Once all the liquid has been pushed in, place a cotton ball soaked in alcohol over the needle. Then quickly remove the needle from the skin.



7. Gently massage the skin where you gave the injection with the soaked cotton ball. Do this for about a minute. This helps to spread the liquid into the skin.



REMEMBER: the needle and syringe you just used must be cleaned and then boiled before you can use it again!

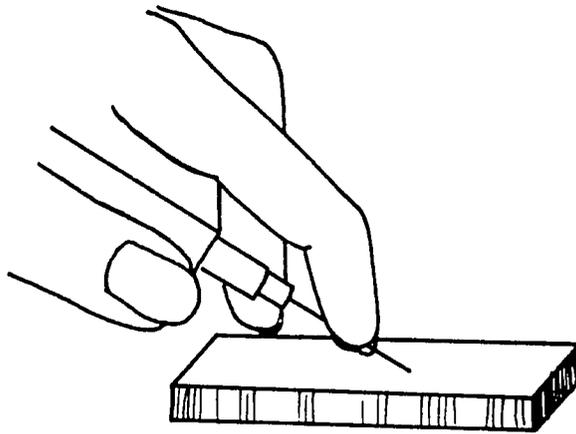
SHARPENING THE NEEDLES

Needles become dull when you use them a few times. Often their tips become rough when the needles are not handled with care. Needles should not be dull nor rough. They must be sharp. Needles which are not sharp cause pain and bleeding.

It is necessary, then, to sharpen the needles after you use them four or five times. Your teacher will show you how to do this. But here is a review of the important points you will need to remember.

1. Take your sharpening stone. Pour a drop of oil onto it.
2. Hold the needle between your thumb and forefinger like in the drawing.
3. Move the needle around in a circle on the stone. This sharpens the needle.
4. Now wipe the needle over a piece of cotton. If the needle does not drag or does not pull away any cotton, it is sharp enough to use.

Once you have sharpened the needles, it will be necessary for you to clean and sterilize them before you use them.



IMMUNIZATIONS

Most of the time, the Village Health Promoter will only be using a needle and syringe when he is giving an immunization. What is an immunization? Think of it in this way.

You already know that good health habits help to prevent sickness. Health habits like these:

1. building and using latrines
2. boiling your water
3. washing fruits and vegetables
4. keeping your body clean

There is another way to prevent some illnesses. How? By immunizations! An immunization (also called vaccination) gives the body the power to resist illness. When it rains, what do you do to protect yourself from getting wet? You protect yourself with a cover of some kind, like a big banana leaf. An immunization is like the leaf. It protects you from illness.

An immunization cannot protect you against all illnesses. But it can protect you against some. Some of these illnesses are tuberculosis, whooping cough, smallpox, and measles. Many of the immunizations should be given to the young child to protect him as he grows. But if an adult has not had some immunizations, then those can be given to the adult. These include immunization against tuberculosis and smallpox.



a banana leaf
protects you from rain

an immunization protects
you against sickness

To immunize someone against an illness, the Village Health Promoter gives him an injection of a vaccine. Vaccines are special immunization solutions. They need to be handled with care. They must be refrigerated. Even when you take the vaccine out to use, they must not become warm. Put them back in the refrigerator promptly. When the vaccines become warm, they become spoiled. They cannot be used then. Never give a person a warm vaccine. It will NOT protect him from sickness. Because vaccines are very expensive, it is a waste of money to let them become warm and spoiled.

Here is a list of vaccines the Village Health Promoter will give to immunize his village. The list will tell you when and where to give the immunization.

BCG VACCINE

- * protects against tuberculosis
- * give only once, anytime after birth (the sooner the better)
- * give just beneath the skin of the right shoulder

DPT VACCINE

- * protects against diptheria, whooping cough, and tetanus
- * give anytime after the age of 2 months (the sooner the better)
- * give 3 injections - allow 1 to 3 months in between each injection
- * give a fourth injection one year after you give the first injection
- * give in the muscle of the buttock or thigh

POLIO VACCINE

- * protects against polio (a crippling disease)
- * give anytime after the age of 2 months (the sooner the better)
- * give drops - not an injection
- * give 3 doses - allow 1 to 3 months in between each dose.
- * give one more dose in 15 months

SMALLPOX VACCINE

- * protects against smallpox
- * give once anytime after birth (the sooner the better)
- * give another dose 5 years later
- * how to give:
 1. clean skin on the left shoulder with alcohol
 2. let dry completely
 3. place a drop of vaccine on the cleaned skin
 4. use the special smallpox needle to spread the drop of vaccine around in a small space
 5. gently prick the skin several times to let the vaccine go in

BUT DO NOT CAUSE ANY BLEEDING!

MEASLES VACCINE

- * protects against measles
- * give once, anytime after the age of 7 months
- * give in the muscle of the buttock or thigh

TETANUS TOXOID VACCINE

- * protects against lockjaw
- * give to expectant mother to protect baby
- * give in the upper arm

IMMUNIZATION SCHEDULE

IMMUNIZATION	FIRST IMMUNIZATION	ADDITIONAL IMMUNIZATIONS
BCG	Birth to adult	none
DPT	2 months to adult 3 injections spaced 1-3 months apart	1 injection 1 year later
MEASLES	7 months to adult	none
POLIO	2 months to adult 3 doses spaced 1-3 months apart	1 dose 1 year later
SMALLPOX	Birth to adult	1 immunization 5 years later
TETANUS TOXOID	Before birth of baby to expectant mother	

Here is another schedule of immunizations. It is for children and it is an ideal one. Not every child will follow this schedule exactly. It tells you when an immunization should be given if there were never any difficulties in giving or receiving immunizations.

<u>WHEN TO GIVE</u>	<u>WHAT TO GIVE</u>
BEFORE BIRTH OF BABY (TO EXPECTANT MOTHER)	TETANUS
BIRTH	SMALLPOX PCG
2 MONTHS	DPT POLIO
3 MONTHS	DPT POLIO
4 MONTHS	DPT POLIO
7 MONTHS	MEASLES
1.5 MONTHS	DPT POLIO
5 YEARS OF AGE	SMALLPOX

This is the best schedule to follow to be sure a child has the right immunizations at the right time. But sometimes it is not easy for the family to bring a child for immunizations when the time is right. So then you must give the immunizations as close to the right time as you can.

Remember that there must be three immunizations for DPT and Polio. There may be one, two or three months in between each immunization. The additional immunizations for DPT and Polio are given 13 months after the first immunizations.

Keep a record of each child's immunizations. Also keep a record of the date the immunizations are given. Use the immunization page of the weight-for-age chart to record this information. (See the sample below.)

Road to Health Chart

Clinic		Child's no.
Child's name		
		Boy/Girl
Mother's name		Registration No.
Father's name		Registration No.
Date first seen	Birthday-birthweight	
Where the family live: address		

BROTHERS AND SISTERS		
Year of birth	Boy/Girl	Remarks

ANTI-TUBERCULOSIS IMMUNISATION (BCG)
Date of BCG immunisation
.....

SMALLPOX IMMUNISATION
Date of immunisation
Date of scar inspection
Date of reimmunisation

POLIOMYELITIS IMMUNISATION
Date of first immunisation
Date of second immunisation
Date of third immunisation

WHOOPING COUGH, TETANUS & DIPHTHERIA IMMUNISATION
Date of first immunisation
Date of second immunisation
Date of third immunisation

MEASLES IMMUNISATION
Date of immunisation

OTHER IMMUNISATIONS
.....
.....

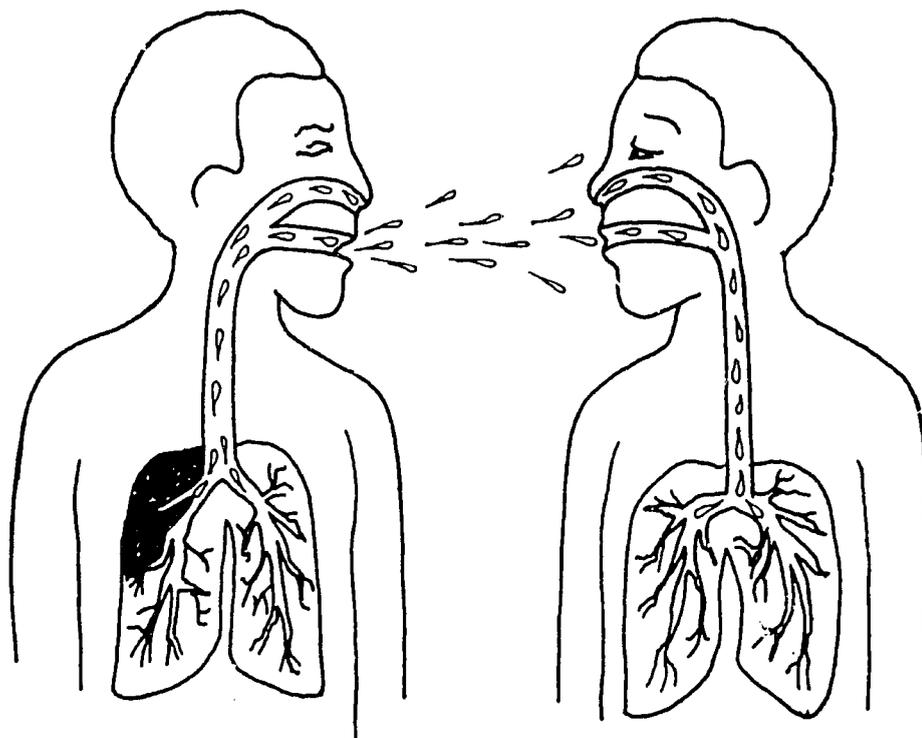
TUBERCULOSIS

INTRODUCTION

Tuberculosis is a disease which may damage many parts of the body. However, it is the lungs, or the breathing paths inside your chest, that are damaged most often.

Tuberculosis is caused by germs which are too small to be seen without a microscope and which spread from one person to another. How are these germs spread? By coughing. When a person coughs, the tuberculosis germs are sent out into the air. When another person breathes in the air, the tuberculosis germs go into the lungs and the person gets the disease. The picture on the next page shows how this happens.

Besides coughing, tuberculosis can be spread by sneezing and shouting. Even spitting can spread the disease and spitting is something which many people do. When a person with tuberculosis spits on the ground, the germs mix with the dust and are blown about in the air. If this dust is inhaled by other people, they can get the disease.



A person gets Tuberculosis when he breathes in droplets in the air from the mouth or nose of a person with Tuberculosis.

SIGNS

The germs of tuberculosis grows very slowly in the body. It can be months before a person with tuberculosis knows that he is sick. As a Village Health Promoter, you must look for any sign which might tell you whether a person has tuberculosis or not.

To help you, here is a list of the four most common signs:

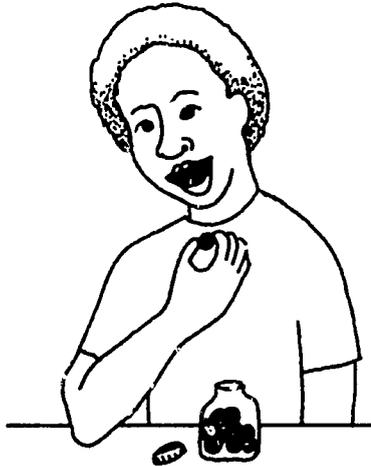
1. cough that lasts more than 3 weeks.
2. loss of weight.
3. low fever that will not go away, which often appears in the evening.
4. coughing up of mucus and/or blood.

Of these four common signs, the most important one is the cough that will not go away.

There are other signs to look for too: difficulty in breathing, sweating at night, and a pain in the chest. Even weakness which keeps a person from working can be a sign. So if a person has any of these signs - especially a serious cough - ask him to go to the health post to be checked.

WHAT YOU ARE TO DO FOR TUBERCULOSIS

1. If you think someone has Tuberculosis, send him to the health post immediately for tests.
2. If patients are told at the health post that they have Tuberculosis, remind them that Tuberculosis is curable. However, tell the patients that to be cured they must take all their medicine faithfully. This will be for a long time; anywhere from 1 to 2 years. Within a few months after beginning the medicine, the patients will start to feel better and may stop taking their medicine. This is not a good thing! The patients must be told that they may feel good now, but later they will get sick again and perhaps die. PATIENTS MUST NOT STOP THEIR MEDICINE! Only the check-ups at the health post will tell a patient if he is cured.



Take all of your medicine!

3. Have the patients to return to the health post every three months for a check-up or when directed by the health post staff. Do all you can to see that the patients keep appointments.
4. If the patient will still not take his medicine or go to the health post after all your encouragement, give his name and address to the staff at the health post and to the village leaders. Then they can check on the patient.

5. Give your patients and their families this helpful information:

These tips can prevent Tuberculosis from spreading:

- a) air out your house.
- b) turn away from others, and cough, sneeze or spit into a piece of cloth; use your left hand for coughing or sneezing so that your right hand will be clean when you shake hands or need to use it. Wash your hands as often as you can.
- c) wash the cloth everyday and dry it in the sun to kill the germs.
- d) turn away from others who cough and sneeze into the air.

6. Visit your Tuberculosis patients every month. Give them their monthly supply of medicine. Check to see if they took all of the medicine last month.

7. Sometimes a patient may develop a rash while taking the medicine. His skin and the whites of his eyes may turn yellow. A patient may also have an upset stomach and start vomiting. Other strange things may happen too. If these things happen, have the patient stop the medicine and go to the health post.

8. At the health post, the patient will be given a "Tuberculosis card" with the following information on it:

- a) name
- b) tuberculosis registration number
- c) name of health post in charge of treatment
- d) date of attendance
- e) signature of examiner

9. A sample card is shown below. (The card you use may look somewhat differently.)

Name of Patient _____ TB Reg. No. _____	
Health Post _____	
Date of Attendance	Signature of Examiner

10. A staff member at the post will sign his name in the right column next to the appointment date. This will tell whether the appointment was kept or not. Then he will fill in the next appointment date. On your monthly visits to the patient, you can check the card to see if the patient is keeping his appointments.
11. You must keep a record on all Tuberculosis patients in your village. This information must be written down and kept in a safe place. Here is a sample of your record form; it can be used as a guideline on your home visits. (The card you use may look somewhat differently.)

Name of Patient _____		TB Reg. No. _____	
Address of Patient _____		Date _____	
		Treatment Started _____	
Dates of Health Post Appointments (check if attended)		Dates of Home Visit and Brief Note About Patient	

12. Here is what to record:
- a) patient's name and address
 - b) tuberculosis registration number
 - c) date treatment started
 - d) dates for check-ups at the health post
 - d) dates of your home visits with brief notes. Write the number of pills not taken since your 1st visit. Write whether the patient is going to the health post or not.
13. Each Tuberculosis patient will be given his own Tuberculosis number. No two patients will have the same number. This number will be on all the patient's records.
14. Tell the patient that he should present his Tuberculosis card each time that he goes to the health post for a Tuberculosis check-up. The card should also be presented whenever the patient goes to the health post or the hospital for any other reason.

15. Besides the person who has Tuberculosis, you must also be concerned with his family and friends. Therefore, check all those living in the house for the signs. The chances are great that others will have Tuberculosis too.

Ask the family about close friends they see often. You must check them too. Tell the family and friends that they may not show any signs right away. But, if they have signs later, they should then contact the Village Health Promoter. Also ask the family if there have been any deaths recently; a dying Tuberculosis patient spreads many germs. All close contacts would be sent to the health post for tests. If a school child is a close contact, you must check all children in his class for signs. Tell the health post about all these contacts.

16. Some of these close contacts will also be put on special medicine. You will need to keep a record on these close contacts too. Visit these patients monthly also and give them their supply of medicine. Check to see if they took all their medicine last month. Be sure that they keep their appointments at the health post too.
17. You must pay special attention to the children. Tuberculosis is usually more dangerous in a child than in an adult. The disease develops faster and often damages many more parts of the body besides the lungs. It also kills faster. Malnourished children are of special concern as they become infected more easily than children who are well-fed. It is important, then, to watch for Tuberculosis signs in children very closely.
18. Visit with the school teachers and explain your role as Village Health Promoter. Tell the teachers about the signs for Tuberculosis. Ask for their help in reporting any possible case of Tuberculosis. Ask the teachers to ask their students occasionally if the students or their parents have signs of Tuberculosis.

19. Tell your community about Tuberculosis. Hang posters. Talk to groups of people and show them pictures. Visit your village leaders; tell them about the signs for Tuberculosis. Ask for their help in reporting anyone who might have the disease. Let them tell the village at a community meeting that Tuberculosis is not a curse but is curable:

- a) if all medicine is taken
- b) if regular trips to the health post are made
- c) if the health tips are followed

CONCLUSION

Tuberculosis is a disease that spreads from one person to another - which is to say that it is a communicable disease. It is important to prevent communicable diseases from spreading. There is a special immunization which prevents people who do not have Tuberculosis from getting it. This is called the BCG immunization. A well-organized immunization program will do much to reduce the number of Tuberculosis cases. You may be called upon to help in this.

MEASLES

WHAT IS MEASLES?

Measles, like tuberculosis, is a communicable disease. It spreads from one person to another even before you see any of the signs! Measles is a very common children's disease, although adults can get it too. Children spread the disease to each other by droplets which come out of the mouth when they cough, sneeze or even talk. Since these droplets are carried in the air, they are breathed in by others who then get the disease. It is very serious when many children have measles. Why? Because many children, especially those who are malnourished, can die. Also, measles can cause malnutrition or make it worse.



Here is a child with the measles rash on his body.

SIGNS

Once a child has measles, he begins to show all the signs of this disease. These signs are listed below:

1. Fever - usually the first sign
2. Sore mouth
3. Sore, red, watery eyes
4. Weakness
5. Body aches
6. Body itches
7. Cough
8. Headache
9. Runny nose
10. Sneezing
11. Small white spots inside the cheek which look like grains of salt, or tiny red spots on the back of the throat. If these are present, the illness is almost certainly measles.
12. Blotchy rash on the body appears 3-7 days after first signs and lasts 4-6 weeks.
 - a) In light-skinned children the rash is reddish-brown.
 - b) In dark-skinned children the rash has no color; you can only see raised spots.

The rash is very characteristic of measles. The rash moves over the body in a special way. It starts behind the ears or on the face in the form of little spots. It spreads downward over the back, chest, and belly with the spots becoming bumps and coming together to form larger splotches. Last of all, the rash moves to the arms and legs but often does not move to the hands and feet.

The spots, which make up the measles rash, are not bumpy and are not filled with pus. The measles spots are flat and come together to form large patches.

TREATMENT

First of all, if you think someone has measles, isolate the child immediately! It is very important to make sure that the child is kept away from others so that he does not spread the disease. Before the rash starts, the child very easily can spread the disease. So the earlier you can identify a case of measles, the better.

If the child is in school, he should stay home from school until he is well: about seven days after the rash first appears. Have the child lie down and get plenty of rest in an area of the house which is not too bright. This is very important! Light hurts the eyes of the child with measles. The child should avoid light. The child should be as still as possible.

Give aspirin according to the schedule in the appendix. If necessary, wipe the child's body with cool, wet cloth. Have the child drink much liquid so that he does not "dry up." The solution given for diarrhea is useful here as well. Give cough syrup for the cough according to the schedule in the appendix. The child's skin will itch, but he should not scratch it. Scratching causes scars. A lotion should be put on the skin to stop the itch. (This is the calamine lotion mentioned in the unit on scabies).

While he has the measles, the child will lose weight. It may take weeks for him to get this weight back. In fact, a child who is already malnourished when he gets the measles may develop marasmus. This is a serious problem you learned about in your food unit. There is a good chance that the child may develop diarrhea too.

Because of this, it is VERY IMPORTANT for the child to eat good food so that he can get better quickly. But when a child has measles, his mouth is so sore that he will not want to eat. Even though it is difficult to get the child to eat, the mother must have patience and keep trying.

The child must eat food from all three food groups three times a day. He especially needs body-building food like beans, fish, and nuts. If a child under two years of age has measles, the mother must still breast-feed. The breast milk is so good for the young child.

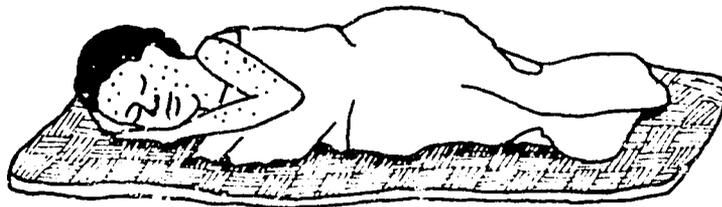
Measles makes a child less able to fight illness. So it is necessary for him to eat right to build his strength again.

At the same time, encourage the family to follow the tips for preventing the spread of tuberculosis. These tips are useful for preventing the spread of measles too. In addition, all the dirty clothes of the patient should be boiled. The person who does this should wash his hands very well afterwards.

Finally, tell the health post immediately about all possible cases.

Here is a summary of what the family needs to know for treating measles.

1. Isolate the child.
2. Have the child get plenty of rest.
3. The child should avoid bright light.
4. Give aspirin.
5. If necessary, wipe the child's body with cool, wet cloth.
6. Have the child drink much liquid.
7. Give cough syrup.
8. Apply a lotion to stop the itch.
9. Have the child eat much good food, especially body-building foods.
10. Practice the tips for preventing the spread of tuberculosis.



Isolate the child with measles
so the disease will not spread.
Have the child get much rest.



It is necessary for the child with measles to eat right to rebuild her strength.

MORE PROBLEMS

If an illness is not properly treated, it can cause other illnesses. Measles can cause another illness called pneumonia. This disease damages the lungs. In fact, the damage can be so bad that the patient could die. If the patient's fever gets very high or if it goes away for awhile and comes back later, he may have pneumonia. Have the mother take the child to the health post.

Measles can also cause tuberculosis. If the patient's cough continues or comes back several weeks after the child gets well, check for tuberculosis. See the unit on tuberculosis for treatment.

If a man or a pregnant woman has measles, he or she may become sterile. That means they may never be able to have children.

CONCLUSION

Measles, like tuberculosis, spreads from one person to another. It is important to prevent it from spreading. Immunization is one way to keep people from getting measles.

The vaccine against measles, however, is very costly. Some countries cannot afford to immunize everyone. Whenever there is an immunization program you will be called upon to help the staff at the health post.

APPENDIX

1. Give aspirin according to the following schedule:

- a) Adults (12 years and older): 2 tablets every 4 hours.
- b) Children (5 to 12 years): 1 tablet every 4 hours.
- c) Young children (2 to 4 years): 1/2 tablet every 4 hours.
- d) Infants (less than 2 years of age): 1/4 tablet every 4 hours.

The patient must take his aspirin tablets at four different times during the day. Instead of taking the tablets every four hours, the patient could take the aspirin:

1. Upon rising.
2. When returning from working in the fields.
3. At the evening meal.
4. When going to sleep.

Or perhaps the patient could take the aspirin in the morning, early afternoon, late afternoon, and evening.

II. Cough syrup schedule:

Children: 1/2-1 teaspoon every 4 hours.

III. Four tips which can prevent the spread of Tuberculosis and other communicable diseases:

- a) Air out your house.
- b) Turn away from others and cough, sneeze, or spit into a piece of cloth; use your left hand for coughing or sneezing so that your right hand will stay clean.
- c) Wash the cloth everyday and dry it in the sun to kill the germs.
- d) Turn away from others who cough and sneeze into the air.

WHOOPING COUGH

WHAT IS WHOOPING COUGH?

Whooping Cough is another common children's disease. It is caused by germs which attack the breathing paths leading to the lungs. These germs cause much sticky mucus to form and as a result the child coughs in a special way.

The child coughs many, many times before he can breathe in. Then when he does breathe in, he must breathe in so strongly that he makes a "whooping" noise. In other words, the child coughs and coughs. Then he goes "whoop" as he breathes in. Once this coughing attack is over, he is relaxed and healthy looking. He shows no unusual signs - except those which he had before the coughing attack began.



WHOOPING COUGH IN YOUNG CHILDREN (1-7 years)

Like measles, whooping cough spreads when one child with the disease sprays droplets into the air by coughing, sneezing or just breathing. These droplets are then breathed in by another child. The signs of whooping cough are in two stages.

In the first stage the child seems to have only a cold. He has:

- *a little fever or no fever
- *running nose
- *sneezing
- *cough (usually at night)

The cough gradually gets worse during this stage which lasts from 7 to 14 days. You cannot be sure that a child has whooping cough during this stage unless the mother tells you that the child was in contact with someone who already had whooping cough.

During the second stage, the cough is very bad. The child will cough 15 to 20 times and then make the "whooping" sound described earlier. Only this sound tells you that the child has whooping cough for sure. After this coughing attack the child may vomit and/or spit out much thick, sticky - but clear - mucus. These coughing and whooping spells may last for months before the child gets well. If not treated properly, the child could die.

There may be other signs during this second stage. These are caused by the hard and forceful coughing.

*nosebleed

*swelling around the eyes

*bleeding into the whites of the eyes causing them to look red

*convulsions

*tongue becomes sore from scraping over the lower teeth during the coughing

WHOOPING COUGH IN BABIES (Birth to 1 year)

Babies do not "whoop". Instead they have coughing or choking attacks, stop breathing for a minute, turn blue, and then vomit mucus. Babies sometimes die during one of these coughing attacks.

Whooping cough is very dangerous and often fatal for babies under six months. Since there is no "whoop", it is not easy to tell what illness they have. If another child in the family has whooping cough, or if there is an outbreak in your village, assume the child has whooping cough and treat accordingly.

WHAT TO DO FOR WHOOPING COUGH

1. Immediately isolate the patient. Keep him inside the house in bed at all times and don't allow others, especially children, to come near, including other children in the family. He must be kept away from others so that the disease does not have a chance to spread. Explain this to your patients and their families.
2. If one child in a family has whooping cough, the chances are great that some of the other children will too. Watch for this and treat as directed. Arrange for all children in the family to be immunized against whooping cough.
3. Tell the child's parents that the child needs plenty of rest lying down in the sleeping area. The child should not play or do too much.
4. Have the child take cough syrup according to the schedule in the appendix.
5. Notify the health post IMMEDIATELY. A health post employee will need to visit the sick child at his house. Do not take the child to the health post as this could infect others.
6. Follow the same tips for controlling the spread of tuberculosis. See the appendix.
7. If the child is not sent to the hospital, visit him every day to see how he is doing and to be sure that there are no complications.
8. If any of the problems on the previous page do happen, treat them as best you can. Then refer the sick child to the health post if necessary.
9. While making your daily visits, check to be sure that the child is taking any medicine which the health post prescribed.
10. The sick child can be taken out of isolation about one month after the disease begins.
11. As with measles and tuberculosis, there is a special immunization which will keep children from getting whooping cough. You may be asked to help with the immunizations.
12. If many children in your village have whooping cough at the same time, you will need to help the health post do these things:
 - a. search out all possible cases
 - b. treat every child with the signs of a common cold as if he had whooping cough
 - c. isolate all these cases
 - d. notify the health post
 - e. help the health post with the vaccinating

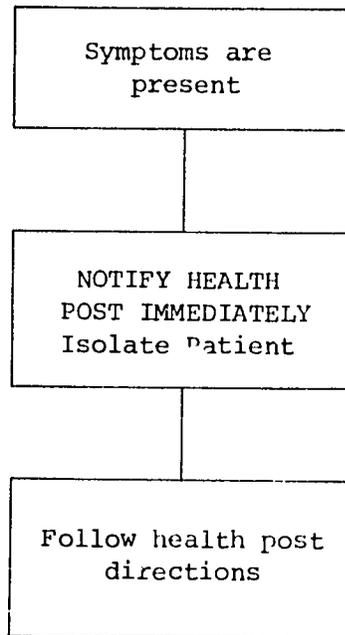
MORE PROBLEMS

1. If a child with whooping cough vomits too much, he will lose weight - even if he is eating well. A child who is already malnourished when he gets the disease may develop marasmus. You learned what a serious problem this is in your food unit. So it is important for the child to eat food from each food group three times a day. Mothers should continue to breast-feed babies and young children.

2. A child with whooping cough can more easily get tuberculosis. If the cough does not go away or get better after several months, suspect tuberculosis - especially if he continues to lose weight. If you suspect tuberculosis, have the mother take the child to the health post for special tests.

3. Whooping cough can also cause pneumonia. This damages the lungs. In fact, the damage can be so bad that the child could die. If the child's fever during the first stage gets high or if it goes away for awhile and the child gets a new one later, suspect pneumonia. Have the mother take the child to the health post.

Here is a summary of how to treat whooping cough.



APPENDIX

I. Tips which can prevent the spread of TB and other infectious diseases:

- a. Air out your house.
- b. Turn away from others, and cough, sneeze or spit into a piece of cloth; use your left hand for coughing or sneezing so that your right hand will be clean when you shake hands.
- c. Wash the cloth everyday and dry it in the sun to kill the bacteria.
- d. Turn away from others who cough and sneeze into the air.
- e. Wash all the patient's clothing, bedding, towels, etc., everyday.

II. Cough syrup schedule:

Children: 1/2 to 1 teaspoon every four hours.

FAMILY PLANNING

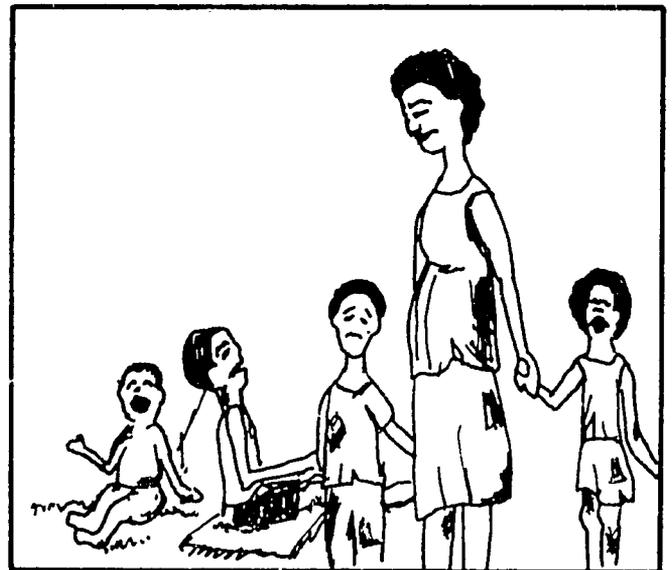
INTRODUCTION

You may have heard your fellow villagers talk about family planning. Many people have said different things about it. Perhaps you are unsure what family planning is.

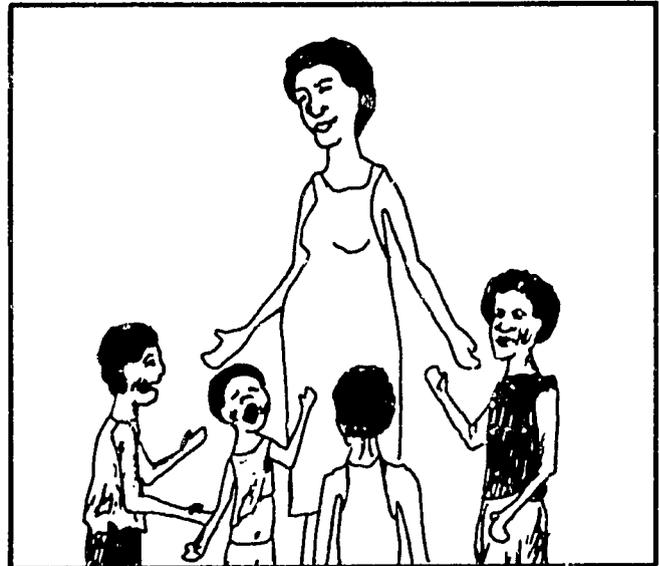
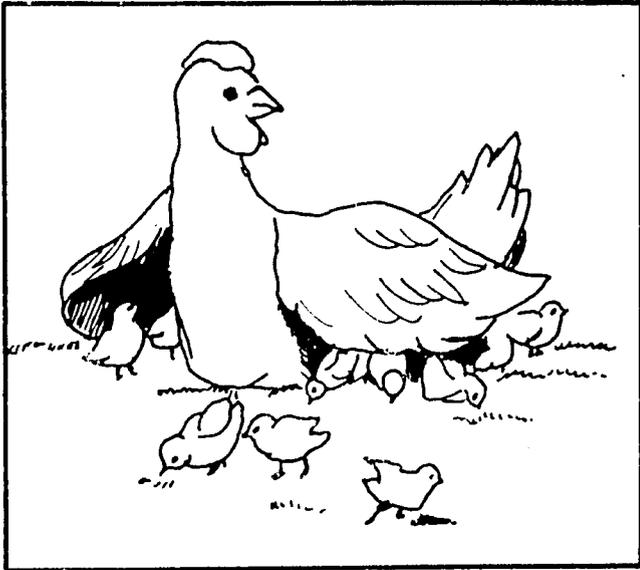
What is family planning? Family planning is having children when you want them and not by chance. Family planning is having only that number of children which the family and country can care for adequately. The woman and man decide how many children to have - usually two or three - and then use modern methods of birth control (also called contraception) to properly space those children.

Why do people practice family planning? Here are some reasons:

1. Spacing children helps protect the health of the woman. Too many pregnancies damage the woman's health. And if a woman is not in good health, she may not be able to do her work. A woman in poor health may not have the strength to care for her family, work in the fields, get water or whatever else her work is.
2. Spacing children helps to protect the health of the children the family already has. If the family has too many children, they cannot be properly fed. Here is an example. If a squash plant bears many fruits, the fruits will be small and not full-sized. So, too, if parents bear many children, the children will be small and not full-sized. They will be thin and will not grow tall and strong.



3. Having fewer children who are properly spaced helps the family give each child a better life. The family may have the opportunity to send the children to school. Then everyone in the family can have a better life. Here is another example: A mother hen with too many chicks cannot get them all under her wings to protect and care for them. So too a mother with many children cannot care for them properly and give them a good, healthy life.



4. Having fewer children who are properly spaced gives women and men the opportunity to share more of their lives with each other.
5. Having fewer children who are properly spaced frees women and men of the fear of having more pregnancies - and children - than they want.

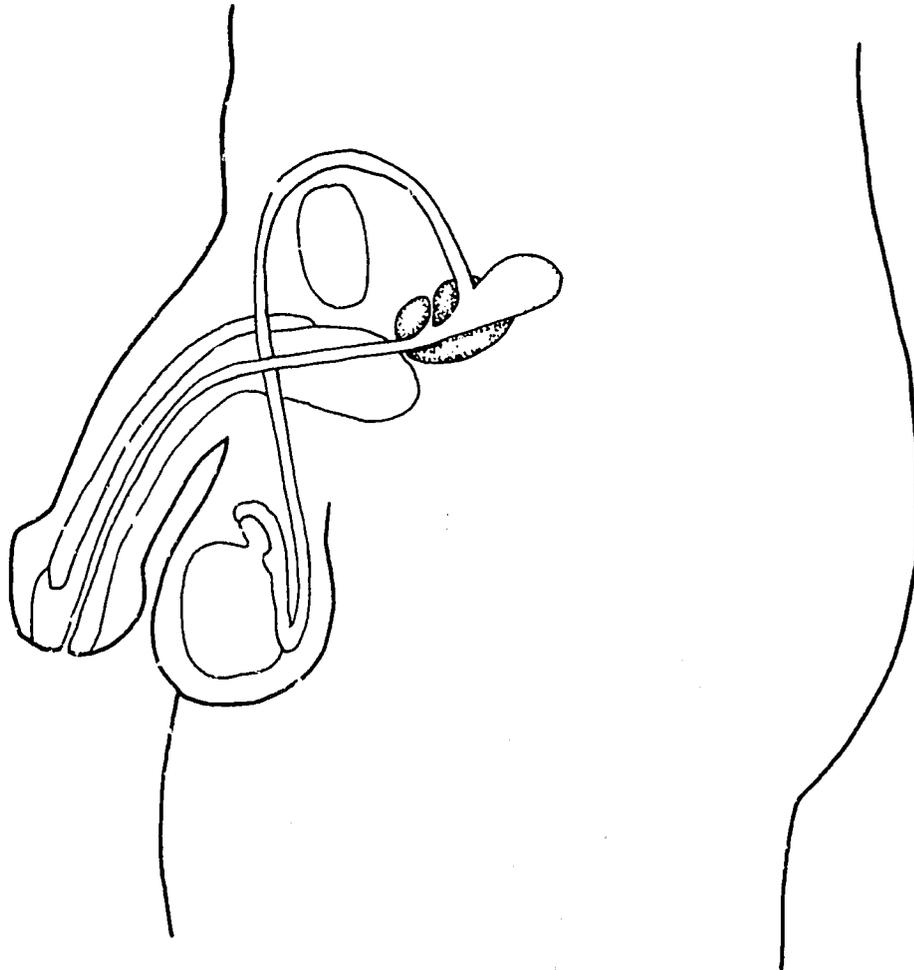
REPRODUCTIVE SYSTEM

Before you learn about ways to prevent pregnancy, you must understand how a woman becomes pregnant and how a child grows inside of her. This part of the training manual tells you what happens inside the bodies of men and women so that they can have children.

MALE

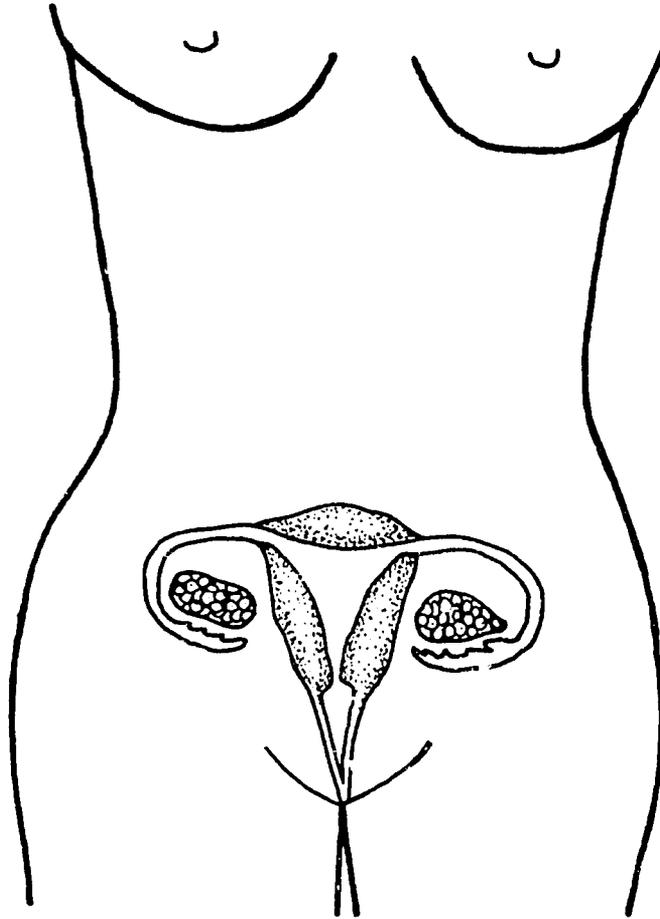
A man's body makes many, many tiny seeds called sperm. The sperm is made inside a bag behind the man's penis. The sperm leaves the bag and travels through tubes to the penis. Liquid is added to the sperm as it moves through the tubes. This liquid helps the sperm move along its path.

When a man is sexually excited, his penis becomes hard and erect. He is ready for intercourse. He puts his penis inside the woman's birth canal. At his sexual climax, the sperm and liquid are then forced out of the penis and are put deep inside the woman's body.



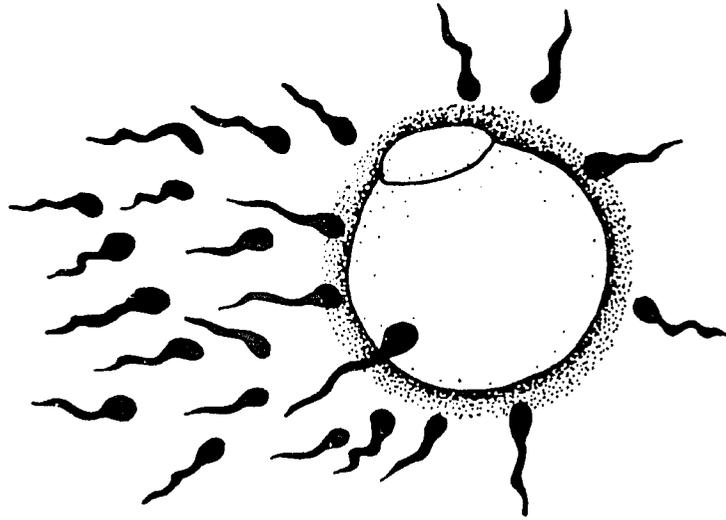
FEMALE

The woman's body also prepares for intercourse. Most of the woman's reproductive system lies deep inside of her body and is in the picture below.



Once a month a tiny egg is made by part of a woman's body called ovaries. (If the woman is pregnant, no egg is made.) A woman has two ovaries. The tiny egg travels from either ovary through a tube and into the womb. While traveling through the tube, the egg may become "fertilized".

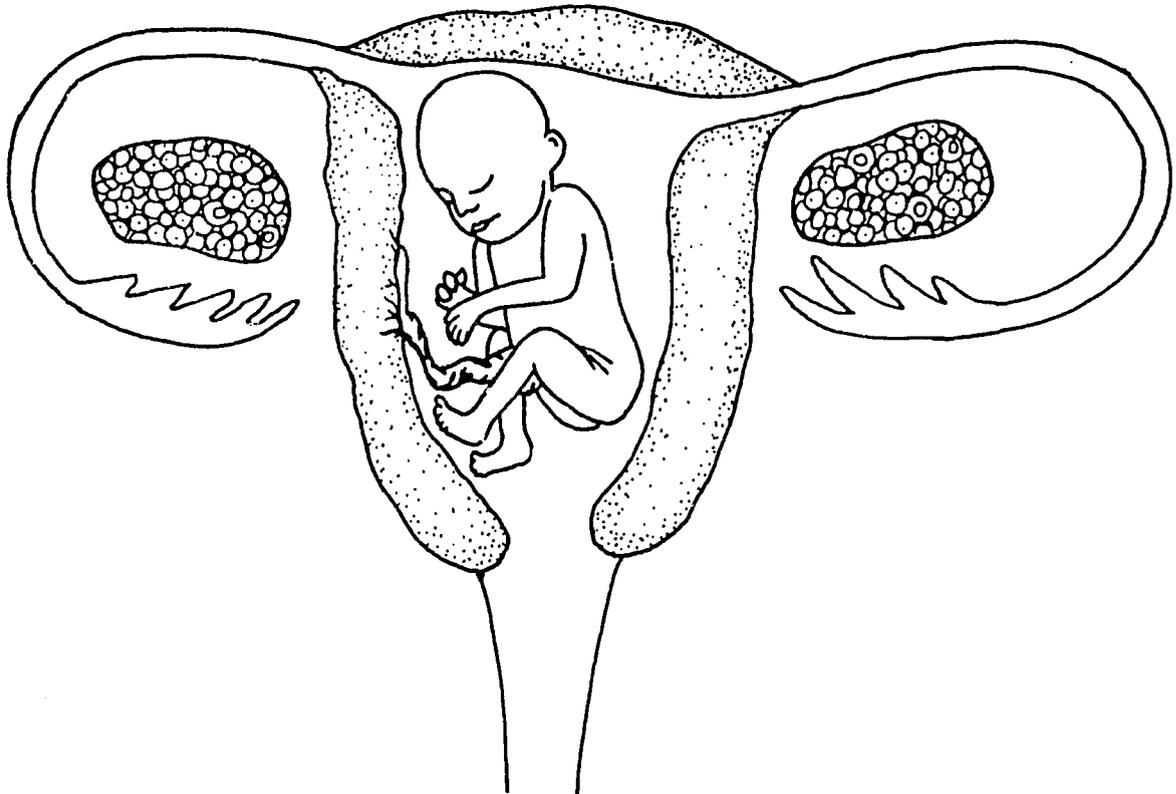
How does an egg become fertilized? The answer to this question has to do with the sex act. During intercourse the man uses his penis to put his sperm deep inside the woman's birth canal. The sperm will swim up the womb and into the tube. If one of the sperm meets an egg in the tube, the sperm enters or fertilizes it. It is only in this way - through the sex act - that a woman can become pregnant.



This drawing shows the sperm fertilizing the egg.

And what happens to the fertilized egg? The fertilized egg moves into the womb where it attaches itself to an inside wall. There inside the womb, the egg will grow into a baby in nine months. At that time the baby is born by leaving the womb and going through the birth canal to the outside world.

What happens if the woman does not become pregnant; if the egg does not become fertilized? It dies and is flushed out of the body in a stream of blood. This is know as menstruation, commonly called the menstrual period. This normally happens once a month if the woman is not pregnant.



Here is a baby growing
inside the womb.

For a woman to become pregnant and have a baby, two things are needed:

1. One sperm from the man's body.
2. One egg from the woman's body.

There is only one way to get these two things together. And that one way is the act of sexual intercourse.

If the man and woman want to experience the act of sexual intercourse and enjoy a loving relationship without fear of the woman's becoming pregnant, then they must use some method of birth control or contraception.

Because of the way our bodies mature, it is very possible for young men and women of 13 or so years of age to have sexual intercourse which will cause a pregnancy. These young people too need to know about birth control methods and the responsibility that comes with maturing.

The next few pages will tell you about these birth control methods.

BIRTH CONTROL TABLETS

One method of birth control is the birth control tablet. This tablet prevents an egg from being released into the ovaries of the woman. As a result the woman cannot become pregnant.

These tablets are very easy to use and take. They come in a special package with just the right amount. The woman swallows one tablet every day, and if possible, at the same time each day.

The tablets are a very effective birth control method. There is no need to limit sexual activity as the woman will not get pregnant. However, if she forgets to take the tablet for even one day, she can become pregnant. It is very important that she remember to take the tablet every day.



Sometimes when she starts to take the tablet, a woman may feel some side effects. Caution every woman taking the tablet that she may have one or more of them. In this way a woman will not become upset when she has some side effects. They are listed below:

- *nausea
- *upset stomach
- *tender breasts
- *menstrual fluid that is not as plentiful as normal
- *menstrual period at the wrong time

These side effects usually go away after a short time. If they do not, refer the woman to the health post. Also refer the woman to the health post if there are any noticeable changes in her health after she has started the tablets. While the woman is taking the tablets question her about any problems she may be having. If there are problems, refer the woman to the health post.

CONDOMS

Another birth control method is the condom which was discussed in the unit on Venereal Disease. It is good to take a second look at the use of the condom. A condom is a thin bag which look like this:

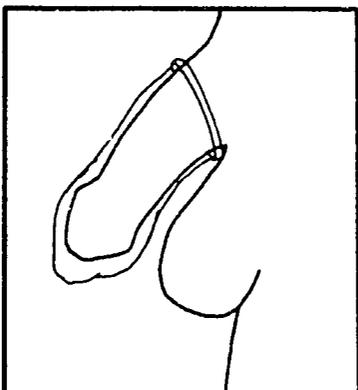


A man puts it onto his hard penis before the sex act. The condom catches the sperm so that the man's seed will not get inside the woman to fertilize the egg. A condom is like a wrapper that goes over a flower on a plant, such as the corn plant, to keep the seeds of the plant from making new plants. A condom by itself does not work too well. But when used with the special foam (see next page), it does a good job. How does a man use a condom? Like this: A man unrolls a condom onto his erect penis. He leaves a space at the tip to catch the sperm. The man is always careful not to make a hole in the condom or else it will leak and won't work. (The sperm will be able to come out through the hole and get to the egg).

When a man takes his penis out of the woman, he must be careful. The penis should be removed shortly after the sex act while it is still hard. The penis must not be allowed to go limp.

The man must hold the end of the condom so that it does not slip off. Should the condom slip off, the sperm will be able to get to the egg to cause a pregnancy. So the man removes the condom carefully and then throws it away. Afterwards he washes his penis and his hands.

A condom can be used only once!



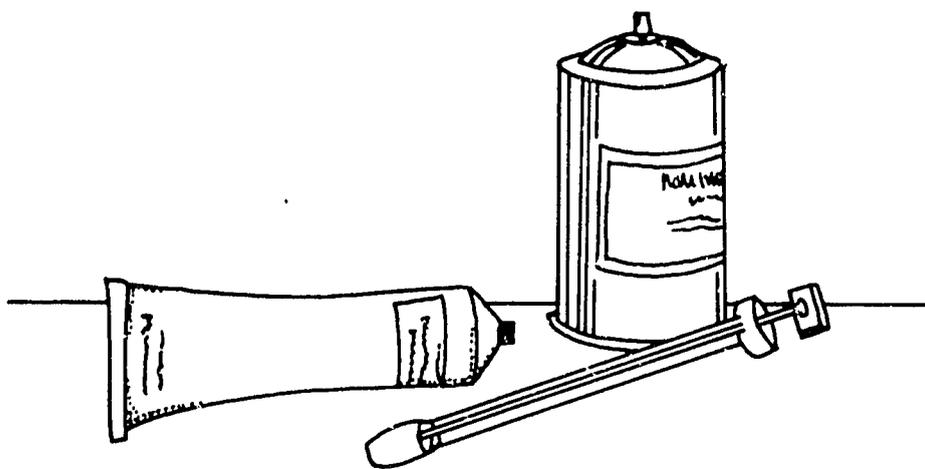
The condom catches the man's seed just as the wrapper catches the flower's seed.

BIRTH CONTROL FOAM

A third birth control method which the Village Health Promoter can hand out is foam. Foam puts a "road block" in the birth canal and, as a result, stops sperm from reaching the egg.

Like the condom, foam is not fully effective. However, using foam and a condom together is very effective in preventing a pregnancy.

The foam comes in a bottle, can or tube. There is a separate tube for taking the foam out of its container. Carefully follow the instructions on each container.



Once it is in the woman's birth canal, the foam will be able to block sperm for up to an hour. So a woman is ready for the sex act immediately after she has used the foam and for up to one hour.

After that time she needs more foam. For each sex act, she must use more foam. If she has had three or four children, the woman then needs two full tubes of foam for each sex act.

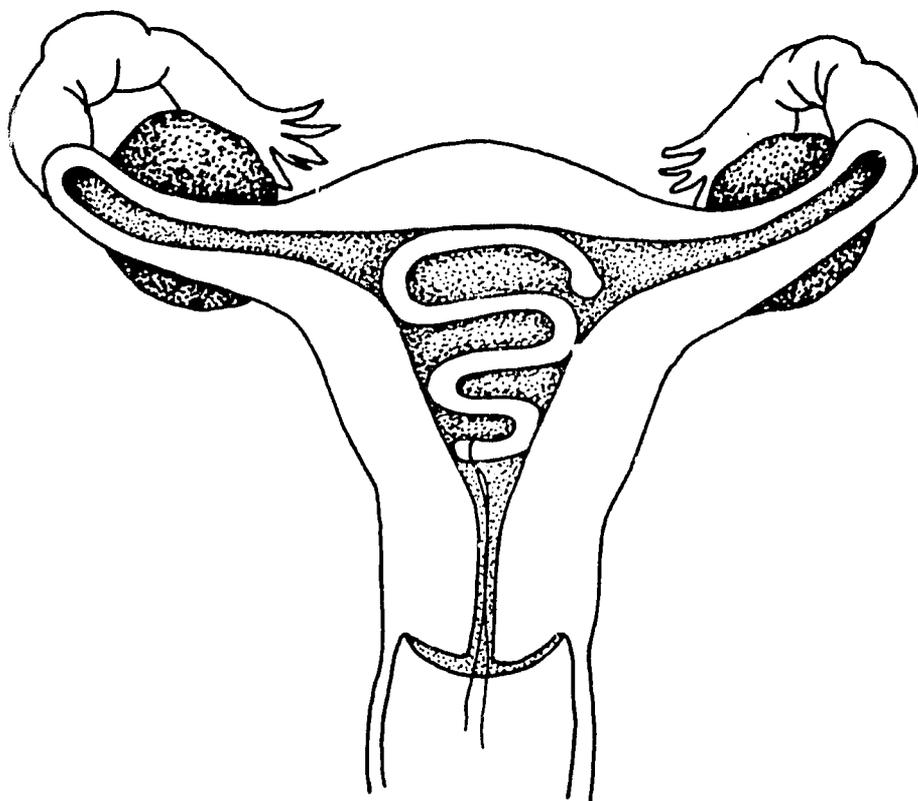
A special note: The woman must keep the tube clean by washing it with good water.

THE INTRA-UTERINE DEVICE

Women in your village may have heard about another method of birth control called the intra-uterine device. It is something which the Village Health Promoter must understand. It is not, however, something which the Village Health Promoter can give to women to use. If a woman wants to use the intra-uterine device for birth control, you must refer her to the health post.

Commonly called the IUD, the intra-uterine device is most often a small piece of plastic. It is very effective in preventing pregnancy. On the next page you can see an IUD that has been placed inside the womb.

The IUD is placed inside the woman's womb at the health post . It is a quick and easy procedure. The IUD is so small and comfortable it does not interfere with normal functions of the body. The IUD still allows for sexual intercourse. A woman still has a menstrual period. Nothing is different - except that the woman does not become pregnant. Should a woman want to have a child, the IUD can very easily be removed.



The IUD will keep the egg from being fertilized inside the womb.

Sometimes a woman may have a few questions about the IUD. After all it is not something normally found inside the womb. It is understandable that a woman may have some questions. The Village Health Promoter must be able to answer these questions and tell the women that they need not worry. Here are some questions which may be asked:

1. Does the IUD hurt?

There may be some pain for a day or two after the IUD is put into place. (Aspirin tablets will take away this pain.) Thereafter there should be no pain. If pain continues, the woman should go back to the health post.

2. Can the IUD go from my womb to other parts of my body?

NO. The IUD can only enter or leave the womb through the opening to the womb. There is absolutely no other place for it to go.

3. What if I become pregnant anyway while wearing the IUD?
What will happen to my baby?

Nothing will happen to your baby. It will not be harmed. The IUD will come out after the baby's birth.

4. Will there be a change in the amount of menstrual fluid?

Yes. There will be more fluid at each menstrual period. But this is no cause for worry.

PREGNANCY; SIGNS

Even though you will encourage people to use modern methods of birth control for the purpose of family planning, there will still be pregnancies. As the Village Health Promoter, you need to know:

1. What the signs of a pregnancy are so that the woman will become especially careful about her health and the baby's too.
2. What problems a woman might face during a pregnancy and what to do about them.

Once a woman is pregnant it is necessary for her to stay healthy, have a normal birth, and deliver a healthy baby. To be sure the pregnancy is going well all pregnant women should go to the health post as early as possible during their pregnancies. This is important because good care during the pregnancy can prevent problems later. A woman can no longer be concerned with her own health. She must also think of the baby's health. So urge women very strongly to go to the health post.

Although women usually know when they are pregnant, here is a list of some of the common signs of pregnancy:

1. A woman has not had a menstrual period for two months or more.
2. Her stomach gets bigger.
3. She may have "morning sickness." Pregnant women often feel sick to their stomachs, and sometimes they vomit. This may happen every day for the first few months - especially in the morning.
4. A pregnant woman needs to urinate frequently.
5. She feels tired and has little energy during the early months of pregnancy.
6. The woman's breasts may get bigger and feel tender.

PREGNANCY: PROBLEMS

Some women can have special problems while they are pregnant or when they are giving birth. These problems can even put the baby in risk of becoming very sick in the womb, during birth or soon after birth. These problems can also put the baby and mother in danger of dying.

A pregnancy which has special problems is called a "high risk pregnancy." It is very important for a woman with a high risk pregnancy to go to the health post as soon as possible. There she can get the help she needs to have a more normal pregnancy. Here is a list which tells you the signs of a high risk pregnancy.

1. Any pregnant woman over 35 years of age could have problems.
2. Any pregnant woman under 5 feet 1 inch in height could have problems.
3. A girl of 15, or even younger, who is pregnant could also have problems.
4. There is bleeding from the womb during pregnancy.
5. Swelling of the legs, feet, or face. The swelling can be especially noticed in the eyelids.
6. Severe headache which seems to never go away.
7. History of trouble during an earlier pregnancy - such as children who died.

WHAT TO DO ABOUT FAMILY PLANNING

Now that you know about family planning and methods for birth control what are the duties of the Village Health Promoter with respect to family planning?

1. You must encourage men and women to use methods of birth control for family planning.
2. You must check the people using such methods regularly. At these checks give more tablets, condoms or foam. If a woman is using an IUD, ask if it is causing problems. If there are problems, send the woman to the health post. You must also help with any problems the people have so that they will continue to use the birth control methods.
3. If none of these three birth control methods works or if the user has any problems with them, refer the person to the health post. There are other birth control methods for use in family planning. But these methods require the services of the staff at the health post.

The Village Health Promoter must realize that in the beginning it may be difficult for people to accept these new ideas about family planning. However, as they learn more about family planning from you, people will be able to accept these ideas more willingly.

Of course, this may not be easy. People often cling to old ways of doing things - even when they are not good. Let's look at some examples.

1. A man needs many children to prove his manliness. He may brag about how many children he has fathered. But what happens to them after they are born? It is also manly for a man to raise strong, healthy children. This shows how much he loves them. And that love is a very manly thing.

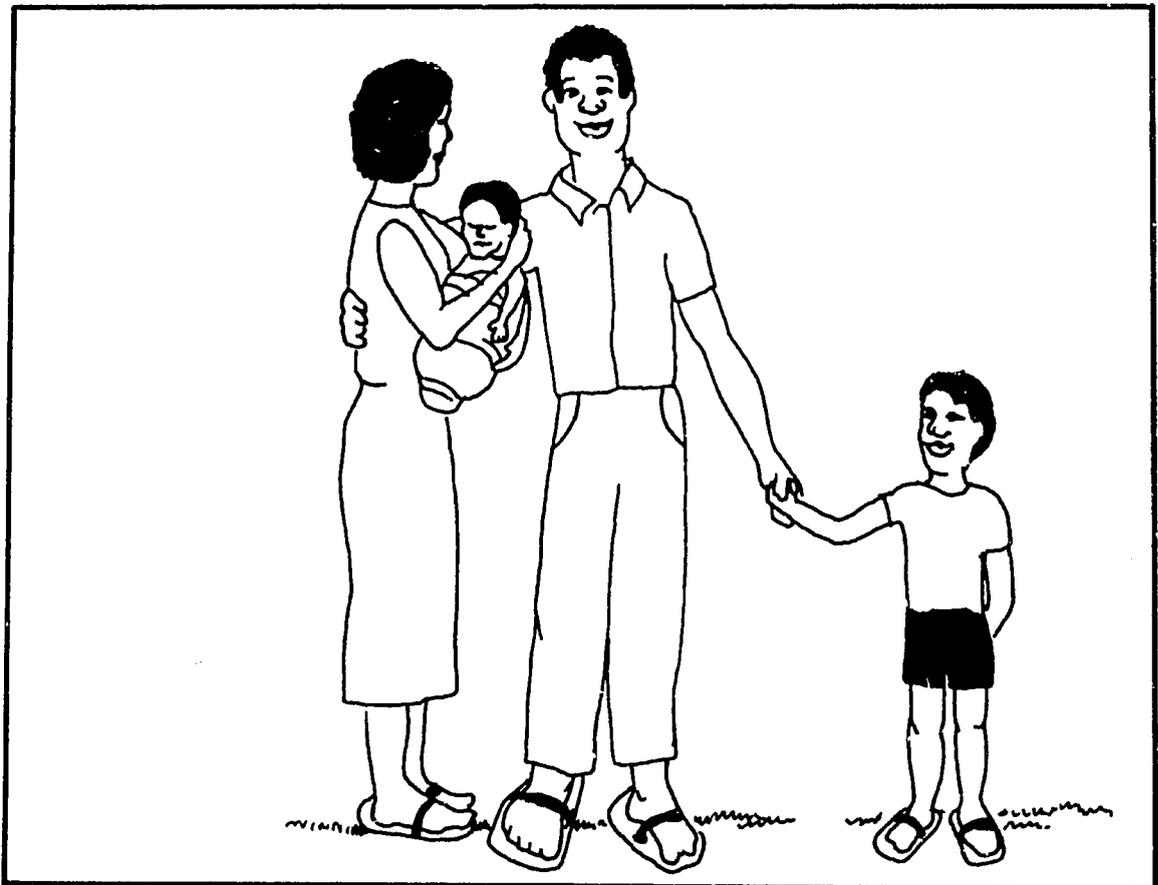
2. We need many children to help with the work. But if the children are sickly, how well can they work? A few healthy children will be able to work better than many sick children. Besides, a few healthy children will grow up strong and be able to care better for their parents when the parents are old.
3. We have no control over the number of children we have. We must accept whatever number of children we have. People who say this forget that they have the ability to make decisions and plans. Planning and spacing a family is one decision these parents can make.
4. A village to be strong needs many citizens. But how strong can a village be if many of its citizens are weak and sickly? Spacing children properly make for healthy, strong future citizens.

All of these beliefs for avoiding family planning are NOT true. You must help people understand that these beliefs are not true. You must be patient as it may take a long time to convince some people of the usefulness of family planning.

Whenever you talk about family planning and the different birth control methods, talk to the man and the woman. Both husband and wife should know about these things. Since they are partners, it is necessary for both of them to learn about family planning. Then they can talk between themselves about what to do.

If you talk to only one, you will not be as effective. So try very much to talk with both the man and the woman.

And if you cannot talk with both for some reason. Talk with one of them. It is better to talk with one than to none.



LEPROSY

Leprosy, like tuberculosis and smallpox, is a communicable disease. It spreads from one person to another. But it can only spread if the person with leprosy is not being treated. If the person is getting treatment for the disease from the health post, then he does not spread the disease.

Leprosy is also an illness which does not happen quickly. Leprosy slowly gets worse over a long, long time. Persons with leprosy lose the feeling in their hands and feet. Often they burn themselves or cut themselves and do not ever know it!

Persons with leprosy seem "to wear away" their hands and feet because they let burns and sores become worse. They cannot feel any pain and so do not know when they are hurting themselves.

Leprosy is also a misunderstood disease. There are many false beliefs and superstitions about this illness. Because of the them, people with leprosy carry a heavy burden. They are treated like outcasts by their fellow villagers. Once the Village Health Promoter knows the facts about leprosy, he can teach them to the village. Then everyone will understand this disease better and not be so afraid of it.

SIGNS

A person with leprosy loses his sense of feeling. In time he cannot feel any pain. This loss of feeling is an important sign.

There are other signs too. They are listed below.

There are two lists of signs because there are two types of leprosy. We will call them Type I and Type II. But the loss of feeling is a sign for both types.

TYPE I

1. Patches or spots of the same color or different colors.
2. Loss of feeling inside the patches or spots
3. Patches feel rough and dry.

TYPE II

1. Thick lumps under the skin which look like small pieces of rope.
2. Ears become thick and square-looking
Lumps form on the earlobes.
3. Eyebrows fall out.
4. Large sores which do not go away and
and which do not even hurt or itch.
5. Patches or spots of the same color
or different colors.
6. Loss of feeling inside the patches
or spots.

If a person comes to you with these signs or you see someone with these signs, send that person to the health post for tests and treatment. It is important!

Remember that leprosy is not something which happens quickly. It gets worse very slowly. In fact the very earliest signs may be the signs of a bad cold. When a person has a bad cold which will not go away, send the person to the health post for tests. The person may have a more serious illness. Much grief can be prevented if help is sought early!

DO NOT WAIT FOR TRAGEDY. SEEK HELP EARLY.

TREATMENT

If not treated, leprosy can spread from one person to another but special medicine can keep it from spreading. This is an important part of the treatment.

1. Send the patients to the health post for special tests.
2. If they have leprosy, then they must take medicine - for a long time. Encourage the patients to do this. Once the patients begin to feel better from the medicine, they may stop taking it. This is not a good thing! The patients must be told that the disease is not really cured. Only the tests at the health post can tell if the leprosy is gone. PATIENTS MUST NOT STOP THEIR MEDICINE. (This is the same advice you must give your tuberculosis patients, too.)
3. Visit your leprosy patients every month. Give them a monthly supply of medicine. Check to see if they took all of their medicine last month.
4. Sometimes a patient will not take his medicine even when you have greatly encouraged him too. In this case, give his name and address to the staff at the health post and to the village leaders. Then they can check on the patient.
5. Teach the patients and the villagers about leprosy. Tell them the false beliefs AND the truths about leprosy. Tell the villagers how good health habits help to keep people healthy. Remind them of the health habits you have learned in such units as Keeping Clean, Sanitation, and Tuberculosis.
6. Sometimes the BCG immunization helps to keep someone from getting leprosy. Babies and young children especially should be immunized.
7. Encourage the villagers not to treat the person with leprosy as an outcast.

PREVENTION

Persons with leprosy lose their sense of feeling. They can burn, cut or hurt themselves in some way and not know it. Persons with leprosy must protect themselves against all injuries. If they do not, these injuries can lead to very serious problems - such as the loss of a hand.

Here are a few tips for someone with leprosy to follow. Give your patients these tips:

1. Always protect your hands and feet from anything which can hurt them.
2. Never go barefoot! Wear sandals.
3. Never pick up a hot object unless you use a thick cloth, or something like that to protect yourself.
4. Do not smoke. The cigarette may burn you.
5. Everyday check your hands and feet for splinters, blisters, cuts, and sores. Remove all splinters. Keep all cuts and sores clean. Treat them so they can get well. Do not let them become worse. If necessary, rest your hands and feet so all sores can heal. If you are not able to check your hands and feet everyday - have a relative or friend check them for you.
6. Take all your medicine. Never stop the medicine. Take the medicine until the health post or the Village Health Promoter tells you to stop.
7. See the Village Health Promoter for any help.

PREVENT DAMAGE TO YOUR HANDS AND FEET.

CHECK THEM EVERYDAY.

HEPATITIS

Hepatitis is a disease which damages part of the body on the inside. It can be a mild illness which lasts only one or two weeks. Or it can be a serious illness which lasts several months. In either case, it takes a long time for the person to get well. A person may no longer have the signs of the illness, but the person's body is so worn out from the disease. The person will feel tired and weak for a very long time. In fact, it may take weeks - even months - for the person to get completely well.

Hepatitis, like tuberculosis, is also a very communicable disease. This means that it spreads easily from the sick person to the healthy person. The healthy person may get the disease from contact with food or water that has been poisoned with the feces or urine of the sick person. The healthy person may also get the disease from the spit of the sick person. Sometimes a person can get hepatitis from needles which have not been properly sterilized after being used in the care of a person with hepatitis.

SIGNS

What do you look for to tell if someone has hepatitis? You look for these signs:

fever (maybe)

headache

very tired and weak (The person wants to sleep most of the time.)

little or no desire to eat

upset stomach - maybe even vomiting

pain in the lower part of the stomach (abdomen)

urine turns a dark color - almost the color of dark tea with no milk in it.

feces turn a light grey color - almost white

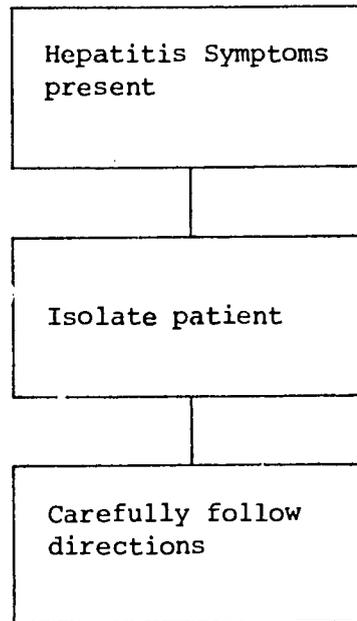
skin and/or white part of the eyes turn yellow

TREATMENT

There is no special medicine to give to cure hepatitis. In fact, medicines will do great harm. The body fights hepatitis by itself. To help the body in its fight, these things MUST BE DONE or the patient will not get well.

1. The patient must isolate himself so the disease will not spread to others. He should sleep and eat away from others in the house.
2. Get much rest. This is very important!
3. Drink much liquid such as good, safe water and the juice from fresh fruit.
4. Eat good food, especially body-building foods like beans, nuts, fish meat, and eggs. Remember that body-building foods help the body to become strong when it is sick.
5. Drink no alcohol during the sickness and for one whole year afterwards.
6. Everything which the sick person uses - like dishes, clothing, bedding - should be kept separate. This helps the disease from spreading. These things should be washed after they are used. No one else should use the dishes of the patient while he is sick.
7. The person who takes care of someone sick with hepatitis should wash his hands after being near the patient. This also keeps the disease from spreading to others. If the healthy person does not wash his hands and then prepares food for others to eat, the healthy person could easily spread the germs of hepatitis to others.
8. Keep the patient clean.
9. Use a latrine or bury or burn the feces of the patient. This also keeps the disease from spreading.

Here is a summary of how to treat hepatitis.



PREVENTION

Since hepatitis spreads easily from one person to another, there are many practices which help prevent hepatitis from spreading. These are the same health habits you have learned in other units such as Sanitation, Keeping Clean, and Tuberculosis. It would be a good idea to read those units again to see which health habits are listed.

As you learn more and more about health, you will see how important these habits are. Tell your fellow villagers about them often. Below is a list of some of these health habits:

1. Use latrines. Feces or urine which contain the germs of a disease cannot spread the disease when latrines are used.
2. Use only good, safe water. Boil your water before you use it. Boiling the water kills the germs of the disease.
3. Keep your hands and all of your body clean.
4. Wash all vegetables and fruits in good, safe water before you cook them or eat them raw.
5. Thoroughly cook food to kill any germs.
6. Wash all clothing, bedding, and the like. Dry them in the sun.
7. Air out the house.
8. Children and adults alike should not swim in dirty river water.

Hepatitis can be a very bad disease. Practice good health habits so you will not get the disease or spread it to others.

TETANUS

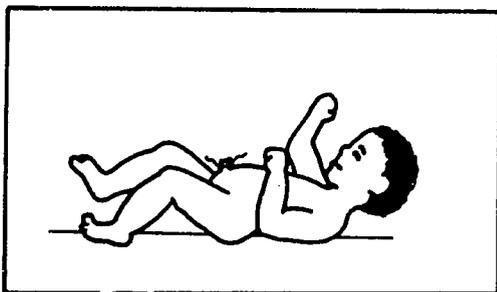
Tetanus is a very serious illness. It can cause much suffering. If not treated as soon as possible, tetanus can even cause death. Quick action on the part of the villagers and the Village Health Promoter may save the life of someone with tetanus.



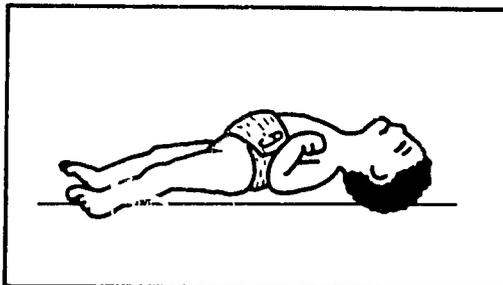
The tetanus germs live in animal feces and in the soil where the feces are found. How does someone get tetanus? - usually from a wound caused by sharp objects like nails, glass, wire, pieces of wood, and the like.

These sharp objects are in the soil along with the disease germs. When a sharp object punctures the hands or feet, then germs go inside. The germs grow better where there is no air. Then the person gets sick.

Newborn babies often get tetanus too - but not in the same way. If the birth attendant uses a dirty knife or other dirty object to cut the umbilical cord, the baby will get tetanus. The baby will also get tetanus if the cord is not kept dry. Sometimes the cord is covered with ashes or other waste matter from the soil. That is local custom in someplaces. If this is done, the baby will get tetanus and almost surely will die.



Yes



No

DO NOT LET TETANUS KILL!

SIGNS

As with all illnesses, there are signs to tell you if a person has tetanus. The person suffers much because parts of the body become stiff like wood or bamboo. The person cannot move!

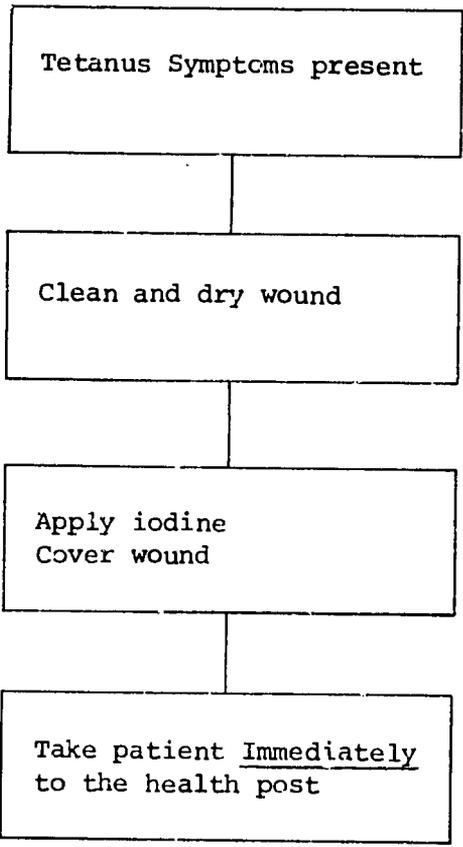
1. A person cannot move his jaw and neck. They become very tight. This is usually the first sign that a person has tetanus.
2. Difficult to open mouth.
3. Difficult to swallow. (The patient may also have a sore throat.)
4. The arms and legs may become very stiff, too.
5. Headache and fever
6. Convulsions (fits). These are very painful. The lightest touch may cause a person to have convulsions. They are a common sign of tetanus.

TREATMENT

If someone comes to you with a puncture wound as described on page 324, of this unit, here is what to do. If someone comes to you with any of the signs on page 325, of this unit, find the puncture wound and begin treatment.

1. Wash your hands very well with soap and clean water. Rinse with water. Then rinse your hands with alcohol.
2. Add some alcohol to a soap and water mixture. Use this mixture to clean the wound. Be gentle and very careful.
3. If there is any oil or grease in the wound, use a small amount of kerosene or gasoline on a cloth to remove it. Then wash the wound with the soap mixture as in #2 above.
4. What should you do if pieces of skin, dirt, glass, metal, wood or the like will not come out after you have cleaned the wound? If this happens, use sterile scissors or forceps to remove the pieces. This step is very important. The wound must be free of everything. The wound must be very clean.
5. Use a clean, sterile pad to dry the wound gently.
6. Soak cotton in iodine. Apply the iodine to the wound as far into the wound as possible. This may cause the patient some pain. Be gentle.
7. Tape a sterile pad over the wound.
8. IMMEDIATELY take the patient to the health post for special injections against tetanus. Do this even if the patient has been immunized against tetanus.

Here is a summary of how to treat tetanus.



PREVENTION

1. Immunization is the best prevention. The immunization can be given to an infant, young child or an adult. It can be given to a pregnant woman to protect her baby before the baby is born. Encourage everyone to be immunized against tetanus. (See the unit on immunizations.)
2. Urge the midwives to follow clean practices when they deliver babies. Emphasize the importance of using a clean object when cutting the umbilical cord. Tell the midwives that it is necessary for the umbilical cord to be kept dry. It should never be covered, especially with dirt or ashes. If it is covered, the baby will get tetanus and can die.
3. Encourage all villagers to visit the Village Health Promoter as soon as possible after they have wounded their hands or feet with dirty, sharp objects. Tell them you may not be able to help very much if they wait too long to see you.
4. Wear sandals to protect against sharp objects in the ground.

PROTECT YOURSELF

IMMUNIZE AGAINST TETANUS

RABIES

WHAT IS RABIES?

Rabies is a very, very serious disease. It almost always ends in death. That is why it needs immediate attention. Quick action on the part of the villagers and the Village Health Promoter may save the life of someone with rabies.

How does someone get rabies? Human beings can only get rabies when they are bitten by a mad, violent or raging animal which already has rabies. The animal is usually a dog, cat, fox or wolf. Other animals, like bats, may also be carriers of rabies.

The Village Health Promoter can usually tell if an animal has rabies. You must look for certain signs.

1. The animal acts very strangely. The animal is restless, very excitable, and very nervous. You can usually sense that something is wrong with the animal.
2. The animal is foaming at the mouth. This is a very noticeable and common sign.
3. The animal does not want to eat or drink.
4. The animal will become suddenly mad and violent. It can be friendly one minute and then suddenly become violent. It may bite anyone or anything without warning.
5. The sick animal usually dies within ten days.

Yes, it is the bite from this type of animal which will give someone rabies. Maybe you have seen such an animal before.

What happens when an animal with rabies bites someone? What signs tell you that a person has rabies? These are the signs of rabies in people:

1. The person is very excited and nervous.
2. There is pain where the animal bit the person.
3. The throat hurts, and there is much mucus.
4. There is severe pain when the person tries to drink.
5. The person may have a fever.
6. The person will be calm for awhile and then suddenly angry and then calm once again. This condition may happen often.
7. As the disease gets worse, the person may have fits (convulsions) and even become paralyzed and then die.

Now you know what happens to a person bitten by an animal with rabies. Next you must learn how to treat the disease.

IMPORTANT

The signs for rabies usually appear two to eight weeks after the bite.

The Village Health Promoter must start treatment before the signs actually appear.

Once the disease spreads throughout the body, there is nothing which can save the person's life.

ACT QUICKLY. RABIES IS A KILLING DISEASE.
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TREATMENT

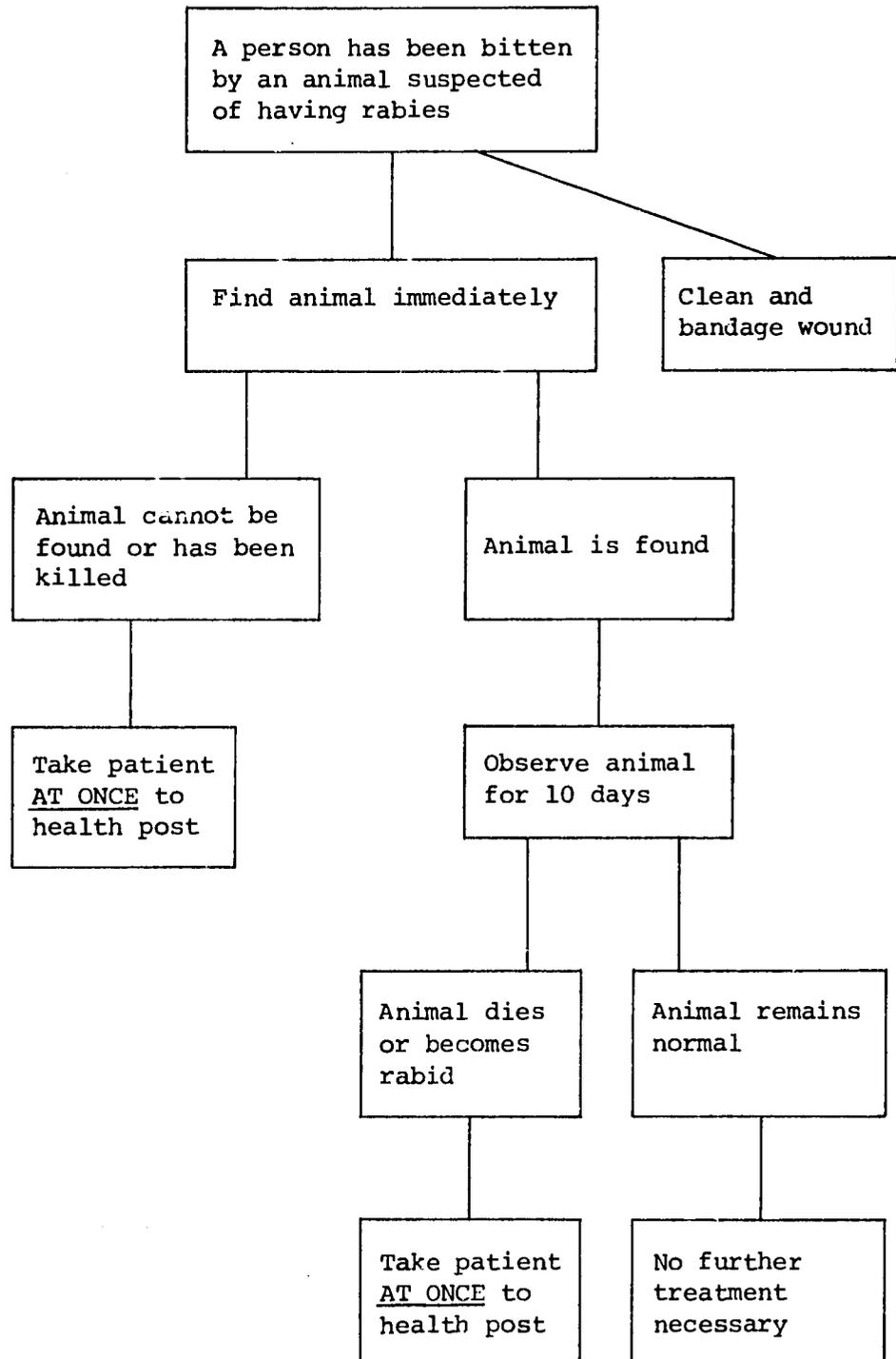
If you think that a person has been bitten by an animal with rabies, here is what to do.

1. Clean the bite wound with soap and clean water.
2. Apply a clean, sterile pad and bandage.
3. Have the person responsible for these things to find the animal as soon as possible.
4. If the animal cannot be found or if the animal has been killed or if the animal dies within the ten days after being caged or tied,
5. Then take the person AT ONCE and WITHOUT DELAY to the nearest health post. The person needs special injections for rabies.

If the animal does not die and does not appear to be sick within the ten days, it usually means that the animal does not have rabies. You will not have to take the person to the health post for the injections. You must, of course, tend to the wound. If the wound seems to be too serious for you to treat, then take the person to the health post. Someone there can fix the wound.

Remember: If there is any doubt whether a person has been bitten by an animal with rabies, send the person to the health post for the special injections. Since rabies is a killing disease, it is best to be safe.

Here is a summary of how to treat rabies.



PREVENTION

1. Have any animal which you think has rabies tied or caged for ten days. If it has rabies it will show the signs. If it does not show the signs of rabies, the animal may be set free. If it has rabies, have the animal killed and buried.
2. Healthy animals can be vaccinated so that they will not get rabies. The Village Health Promoter should help officials when they come to vaccinate animals.
3. Be careful when handling animals which may have rabies or animals who act strangely. The spit from sick animals can also cause rabies. How? By going into a cut or scratch on the person's skin. Tell the villagers about this too.
4. Also tell the villagers to keep their children away from every animal which acts strangely. These animals could be very sick.
5. Teach villagers how very dangerous rabies is.

APPENDIX 1

LIST OF EQUIPMENT AND SUPPLIES

FOR BASIC COURSE

Alcohol
Aspirin
Burn Ointment
Calamine Lotion
Chloroquine
Chlortetracycline
Clean Cloths
Cold Medicine for the Nose (antihistamines and decongestants)
Condoms
Cotton
Cotton Balls
Cotton Swabs
Cough Syrup
Eye Ointment
Flannelgraph Version of Weight-for-Age chart
Gauze
Gauze pads
Gentian Violate
Hypochlorite
Iodine
Iron Medicine
Kwell Lotion
Lice Powder
Milk of Magnesia
Ointment for Ringworm
Pencils and Paper
Permanganate
Piperazine
Portable Scale
Quac-Stick
Razor Blades
Salt
Scissors
Soap
Sugar
Tape
TCE
Thermometer with box for storage
Toothbrushes
Tweezers
Weight-for-Age charts

**ABOUT
PROJECT CONCERN
INTERNATIONAL**

Project Concern International is a non-governmental organization specializing in the development of low cost health care training programs around the world. These programs offer a self-help approach to health care through training Village Health Promoters to provide limited curative care and public health and nutrition education.

Project Concern International also provides advisory services in the health care training and development fields and acts as a worldwide referral and recruitment service for health professionals.

**ABOUT THE
TRAINING MANUALS**

The trainee's manual has been designed for use in training the Village Health Promoter to treat simple health problems. Special emphasis is placed on maternal-child health, nutrition, sanitation and hygiene, and health education.

The instructor's manual is for use in conjunction with the trainee's manual. It explains training techniques, plus includes a bibliography on audio visual aids, health, and education. Both volumes are available in French and Spanish.

It is Project Concern International's hope that these manuals aid in improving the health of people today and in future generations.



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