Youth Club Program Manual

Child Aid ZAMFAM South Central
Introduction

The Zambia Family South-Central Activity (ZAMFAM South Central) is a five-year project being implemented by Development Aid from People to People in Zambia (DAPP) with the sub-partners Creative, KAFHI and NZP+ and with funding and technical support from the American People through USAID/Zambia.

The overall goal of the project is to improve the care and resilience of vulnerable children in Southern and Central Provinces by supporting, protecting and strengthening the capacity of children, families and communities. The goal will be reached by directly involving the children, youth, families, caregivers, community groups and government structures. Activities for children and adolescents living with, affected by and/or vulnerable to HIV, are aligned to the following 4 results:

- Resilience of households to care for children and adolescents increased.
- Child wellbeing status improved due to provision and accessing of quality care and support services.
- Capacity of government and community structures to care for and support children and adolescents increased.
- Strengthen shared learning.

Activities will be implemented in close cooperation with Government Line Ministries and Institutions, Civil Society Organizations, Faith Based Organization and community structures such as Community Welfare Assistant Committees, Village Action Groups, Support Groups for People living with HIV and Youth Clubs.

ZAMFAM South Central will demonstrate the power of Zambians to create change for themselves.

This guide has been designed for the Youth Clubs and the schools to carry out the 10 months Youth Club Program. This booklet contains monthly headlines and content for each of the weekly meetings. It has been designed to be easy to use for the Youth Clubs, the Youth Club Leaders, the schools to which the Youth Clubs are attached, and the teachers who are assisting the clubs.

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# Youth Clubs – The year at a glance

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- Being well and well being
- A healthy body
- Sports day at the school

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**Lessons & Actions**
- Reproductive health
- Myself in a man’s body
- Myself in a woman’s body
- Sharing with our peers

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**Lessons & Actions**
- Growing our own nutritious food
- What to grow and how to do it
- Where to place the garden
- Making the gardens

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**Lessons & Actions**
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- Let us say no to malaria
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- Counting our results

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**MONTH 6**

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**MONTH 7**

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- What to grow and how to do it
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**MONTH 8**

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- Pregnancy and birth
- Using drama to share an important message

**MONTH 9**

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The Youth Club Program Manual

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Welcome to the Program Manual for Youth Clubs

Introduction to the Youth Club members

The Youth Club Manual is made for you, the teenage boys and girls in secondary schools.

The aim of the clubs are to give you a place to work together and share experiences, learn about life important issues and how to deal with challenges affecting youth, and to act together for common improvements.

While working through the Program Manual, you will be presented with topics such as Global Warming and Climate Change; the importance of eating nutritious food and how to get hold of it; expectations in adult life and how to influence the course of your own life; why it makes sense to grow your own food, and how to get started; and many other issues. You will also experience how your knowledge can be used in actions to carry out needed changes. You could say that the manual will lead you on the way to becoming an informed and active citizen in your community.

The Program Manual covers a program for 10 months. Each month has its own headline and plans for one course, two lessons and one action.

Each Youth Club will have 20 to 25 members. The clubs will meet for two hours every week after school hours. Each club will have two Youth Club leaders, who will lead the meetings. The Youth Club Leaders will be trained by the project to be able to give the monthly lessons in the clubs. Once a month, a teacher, or a person from the Child Aid ZAMFAM project, will join the clubs and give the course. If you need it, the Youth Club can also ask for support from the teacher for other activities.

Each club will divide into smaller groups, Trios of 3 members, who will stick together throughout the program, and carry out actions together with their own families, actions at the schools, or actions with neighbors and the community.

The Program Manual for the Youth Clubs is developed for the Child Aid ZAMFAM project, which will be implemented in the South and Central provinces of Zambia, for a period of 5 years.

The project will work together with 125,000 orphaned children and their families. Zambia, with a total population of 15.8 million people, has 1.4 million orphaned children. This is a huge number, and everybody in the local communities need to work together to cope with this situation, and support the orphaned children or youth. This is why it is very important, that you, the youth, take part in training yourselves and working together to make the changes you want to see.

Enjoy!
Introduction to the school and the teachers

This Youth Club Program Manual is developed to provide the students studying in your school with a tool to train themselves in life skills, and in using their knowledge for their own benefit and for the betterment of the people around them, meaning their fellow students, their families and the local community.

The Program Manual describes the weekly activities in the clubs for one year. The Youth Club will meet once a week to carry out the activities as described in the Program Manual.

The school will provide a suitable meeting place with a blackboard, and a teacher who can be connected to the club, and support the youth to carry out the program. The teacher will give one course every month, and be of assistance to the club when the Youth Club asks for it.

The Youth Club will have two leaders who will lead the club meetings, and prepare to present the lessons for the rest of the monthly meetings. Each club and each attached teacher will receive a copy of the Youth Club Program Manual.

The building blocks of the Program Manual
The Program is planned for 10 months. Each month has its own headline, explaining what the main focus of the particular month will be. In the Program Manual, there is a plan for all the activities for each of the ten months. A newly established club can start right away with Month 1 in any month of the year.

In each month there is:
- A course to be given by the teacher.
- Two lessons.
- One Action.

The courses and the lessons are described with:
- A title, telling you what the lesson or course is about.
- An introduction, presenting the content and why it is important.
- An instruction, giving some directions for how the club can work with the issue.
- More knowledge, explaining more about the issue at hand, where more information is needed.
Month 1
I am a Youth Club member

Week 1 – Welcome to the Youth Club
Course: Understanding the program and deciding to enroll

Introduction
Welcome to the Youth Club!
As a member, you are going to stick together with the rest of the Youth Club members to learn, discuss, and try to find solution on matters of interest for the welfare of youth.

Youth is an exciting period of your life. You need to learn many new things, and you might be facing problems and have to make decisions that will affect the rest of your life. A number of youth do not reach adulthood, or their adulthood becomes heavily affected by what you can call avoidable blunders. Most of the issues you are facing today are not restricted to any one ethnic or religious group, but affect young people generally. Our society is changing rapidly, and your parents might not even be able to advise you in all matters, as they had very different issues to solve when they were young. The big issues of the world today are also influencing your well being, now and in your future. The fight to make a better future for yourself and all people starts now.

In the Youth Club, you will learn more on what is happening in the world and discuss how best you can tackle some of these challenges.

In this program, you have courses and lessons about what happens in your body when you change from a child into an adult; you will discuss how to avoid some of the serious diseases such as HIV and Aids, malaria and TB; and you will learn about global warming and climate change. Why it is happening, how it will affect your region, and what you can do to be well prepared for the changes.
You will also organize actions together to improve the wellbeing of people around you, and share your knowledge with your family and your friends at school, and at home.
You will have the opportunity to mingle with each other and learn new things together. It will be a chance to learn how to make decisions and to share your ideas with each other.

Some of the questions you will discuss and find answers to together, are listed hereunder:

When is a good time to get married?
What do we need to eat to be healthy?
Why water is important and why drinking water needs to be clean?
What happens during sex?
Should I continue in school or what should I learn for a living?
When we put our heads together, we can find solutions together as a club.

So, in the Youth Club, you will work together to become knowledgeable, to learn many skills and tricks, and to take actions.

The Youth Club will meet at least once a week after school hours.
Each month has 1 course, 2 lessons and 1 action.
A teacher from your school will be connected to your club, and give the monthly course. The rest of the program will be carried out by you together. You are welcome to invite your teacher to participate whenever you need assistance with anything.

You can look forward to this year in the Youth Club, where you will come to know many important things, and gain experience in putting them into action. It will equip you to protect yourself, and fend for the children in your family and your community. The youth, (meaning YOU), are very important actors in deciding how the next generation in your country will grow up. You, together with others, can make a difference!

**Instruction**
1) The teacher and the Youth Club leaders introduce the Youth Club Program and the manual for the whole year.
2) You discuss the program and decide to enroll in the Youth Club.
3) Each member presents him, or herself, and express what they wish to get out of being a Youth Club member.
4) The Youth Club decides the day and time for the weekly meeting.
5) The Youth Club leader presents the detailed program for the first month.
Week 2 – Being well and well-being

Lesson: What does it mean to live a healthy life?

Introduction
To be healthy means, that all the parts of your body are working well. You feel fresh and alert, and ready to struggle with the issues of the day. On the contrary, if you are not healthy, you feel weak and give up easily when confronted with problems.

What you eat can have big consequences for your health and wellbeing. Food is not taken just to fill up the stomach, but to give the required nutrients to your body. Food is the source of energy for all of your bodily functions. What and how you eat, directly affects how your body grows, and how your mind functions at every stage of your life. When you are hungry, you cannot work or think properly. You need food to be able to carry out your different daily activities, like studying and working in the school garden.

Healthy food is the food that provides good energy for the body. You can fill your stomach with rice or maize, but it is not enough to keep your body in good condition. You can use it as energy for moving around, but there will not be enough to build up your body cells and make your brain work well. For that to happen, you also need proteins, vitamins, and minerals.

When you eat healthy food, you also build a strong immune system. Your immune system fights endless battles with foreign bodies trying to attack you, and cause diseases. Your immune system simply kills the germs. You can only stay healthy when your immune system is strong enough to fight.

Instruction
1) The Youth Club leader reads the introduction to the lesson.
2) Share your own experiences about the difference between being healthy and being ill.
3) Read the “More knowledge’ together.
4) Work in Trios. Make a list of words you think belongs under each of the
headlines “Being well, well-being and living well”, “Mental and brain fitness”, and “Social fitness”.

5) Share your lists.
6) Discuss in the Trios what you can do to live well, and decide for yourself what you should add to your own lifestyle.

More Knowledge
There are more sides to living a good life than being healthy. Read here about them.

Being well, well-being and living well
To be well simply means bodily soundness and absence of illness. To obtain this, healthy food from the garden and sound eating habits are needed and so is exercise, which means the movement of all body parts in a well planned way. On top of this, it will be good to eat food rich in vitamins and some oils.
Age is a condition that will eventually lead to death, but if you stay well, you may postpone that fateful day for many years, and continue to be strong and fit to cope with old age. To be well is up to you, what you do for your body and health.

Well being is a result of fulfilling what you strive for in life, and living a life of sound meaning and purpose, such as living your life with others in a community and sticking together, sharing life and work.
So, in order to have well-being, you need to be healthy, and your productive life must be fulfilling. Only then can social, professional and cultural life also find their right footing. Well being is about you being a productive and social part of your society.
When you are in bodily health and a productive member of society, you are in a good situation. But there is more.

Living well is not least about politics and directions in life. Living well becomes possible when you live and share your life with others. It means upholding high ethics and being a social person, and a person with good morals and principles.

Mental and brain fitness
Sometimes, we believe that bodily fitness and mental fitness are two completely different worlds. Some think that you can be super fit physically, but have a less fit productive brain, or that you can be very bright minded and sharp, and have lousy physical condition. But physical and mental fitness are not two different things, they are intimately related. After all, your brain is a part of your body - and a very important part too.
What you eat influences the brain. This organ consumes more energy than any other organ in your body. The chemicals that your brain uses in order to think, feel, react etc., come from the nutrients you eat.
When you exercise physically, you also use your brain. Physical exercise has been shown, by modern medicine, to dramatically improve mood and the ability to learn, to sleep at night, to be in balance (physically and mentally), and to be able to cope with the struggles of the day.
You might already know this from personal experiences, but scientific measurements of the brain of people exercising, show the chemical and electrical mechanisms. The brain itself needs exercise to function properly. One of the dreadful diseases of old age is dementia, such as Alzheimer’s disease. If throughout your life you use your brain intensively, you will dramatically reduce your chances of getting dementia. Brain exercises will also improve your ability to do physical exercises. When, for example, you perform calculations in your head or try to put together a difficult plan, you use some of the same brain centers that you use to move your body parts, which mean that you become better at moving these body parts simply by using your brain to solve logical problems.

So, you need to exercise your brain as much as possible. This means to be active. Try to learn new concepts, to understand new connections between phenomena you know, and to learn facts you did not even know existed. In this way you improve your mental and brain fitness, and you also use what you learn, to create a richer and fuller life for people around you.

**Social fitness**

Practicing social fitness is also important for you to stay healthy to live a good life. It enables you to be a better person. Certain brain cells and parts of the brain, functions as your social brain. Only people suffering from brain disorder are unable to use this part of their brain. A new born child will soon try to come into social contact, through facial expressions and sounds, with the mother and other people around. The child will in turn, react to contact made by others. If contact is established, the social brain of the child is trained. The child learns to be social. In most animal species, including Homo sapiens, children are more socially oriented than adults. They are likely to hang out with other children, and engage in all kinds of contact with each other.

Some see this as childish and want to develop to becoming their own person, and starts to take less interest in others. This means they use their social brain less, and therefore, it does not develop. Seen under a microscope, you would see social brain cells dying from the lack of activity, while in the real world, you will see persons becoming more asocial and disinterested in other people.

There is a tendency in the modern consumer culture, which encourages individualism and does not value social skills very much. However, people excel when they use their social brains – to teach, to take care of people in need, to engage with other people in their daily work. So you should keep an eye on your own behavior and well-being, and be determined in using and steadily improving your social intelligence, and fitness.

**TAKE CARE OF YOUR BODY. IT’S THE ONLY PLACE YOU HAVE TO LIVE.**
Week 3 – A healthy body

Lesson: Helping my body to stay healthy and strong - making a decision for the years to come

Introduction
Today we know much more than the previous generations on how the body works, and how to stay healthy. Not many years ago, the average living age of people in some countries was as low as 30-40 years. Now, in most countries, people are reaching 70-80 years, and many are getting even older. This puts demands on us to use the knowledge on how to keep the body fit for many years, and it has to start during the youth. If you take good care of your body from an early age, your chances of staying healthy while you grow old are much higher. Another difference is that in earlier times most people had hard physical work from when they were very young. Today, most children stay in school where they sit still for many hours, and some continue to study or get jobs where they do not move much. On top of this, food habits have changed. Even though it is well known what healthy food is, the food producing corporations are more interested in producing food that is cheap to make, than in producing food that is healthy. This means that a lot of the food that is presented as “smart and modern”, such as Coca Cola, burgers and fried food is actually very bad to eat, as it contains too much sugar and bad fats, which are difficult for our bodies to process, and too few nutrients.

Our diet, exercise and behavioral choices can have a significant effect on our health. If you have a poor or unhealthy diet, you may run the risk of lacking nutrients or gaining weight. Besides, doing sport is fun and it brings you together with your peers.

Instruction
1) The Club Leader reads the introduction.
2) Discuss the idea that doing sport improves your health, and list the types of sport each of you like to do.
3) Read the “More knowledge” together. Repeat the explanations until you have understood the meaning.
4) Test how many of the 14 benefits mentioned at the end of the text, you can remember.
5) Divide into smaller groups, and do the Fitness Test together.
6) Decide what you want to do, to get in better shape, and share your decisions.

More knowledge

Exercise and physical fitness

Physical fitness is to the human body what fine-tuning is to an engine. It enables us to perform to our potential. Fitness is the ability to perform daily tasks with energy. It is the ability to withstand stress, to carry on in circumstances where an unfit person could not continue, and it is a major basis for good health and well-being. Physical fitness involves the performance of the heart, lungs and muscles. And, what we do with our bodies also affects what we can do with our minds.

The basic components of physical fitness

1. Cardio respiratory endurance is the ability to deliver oxygen and nutrients to tissues, and to remove wastes, over a period of time.
2. Muscular strength is the ability of a muscle to exert force for a brief period of time.
3. Muscular endurance is the ability of a muscle, or a group of muscles, to sustain repeated contractions or to continue to apply force against a fixed object.
4. Flexibility is the ability to move joints and use muscles through their full range of motion. The sit-and-reach test is a good measure of flexibility of the lower back and backs of the upper legs.
5. The composition of the body is an indicator of fitness. It refers to the makeup of the body in terms of lean mass (muscle, bone, vital tissue and organs) and fat mass. An optimal ratio of fat to lean mass is an indication of fitness. The right types of exercises will help you decrease body fat and increase or maintain muscle mass.

What exercise does to the body

When you exercise or compete in sports, you notice several things about your body. You breathe heavier and faster, your heart beats faster, your muscles hurt and you sweat. As you use your muscles, they begin to make demands on the rest of the body. In strenuous exercise, just about every system in your body either focuses its efforts on helping the muscles do their work, or shuts down. For example, your heart beats faster during heavy exercise, so that it can pump more blood to the muscles, and your stomach shuts down, so that it does not waste energy that the muscles can use.

When you exercise, your muscles act somewhat like electric motors. They take in a source of energy and use it to generate force. They use a chemical called adenosine triphosphate (ATP) for their energy source. During the process of “burning” ATP, your muscles need three things:

• They need oxygen, because chemical reactions require ATP, and oxygen is needed to produce much ATP.
• They need to eliminate wastes in the body (carbon dioxide, lactic acid) that the chemical reactions generate.
• They need to get rid of heat. Just like an electric motor, a working muscle generates heat that it needs to get rid of.

In order to continue exercising, your muscles must continuously make ATP. To make this happen, your body must supply oxygen to the muscles and eliminate the waste products and heat. The heavier the exercise, the greater the demands of the working muscles.

To meet the needs of the working muscles, the body has a coordinated response involving the heart, blood vessels, nervous system, lungs, liver and skin. Because ATP is so important, the body has several different systems for creating ATP.
These systems work together in phases. The interesting thing is that different forms of exercise use different systems, so a sprinter is getting ATP in a completely different way from a marathon runner.

ATP comes from three different biochemical systems in the muscles, in this order:
1. The phosphagen system
2. The glycogen-lactic acid system
3. The aerobic respiration

**The phosphagen system:** A muscle cell has some amount of ATP floating around that it can use immediately, but not for long – only enough to last for about three seconds. The muscles also have compounds called phosphagens, which function like ATP and can supply the energy needs of a working muscle at a high rate, but only for 8 to 10 seconds.

**The glycogen-lactic acid system:** Muscles also have big reserves of a complex carbohydrate called glycogen. Glycogen is a chain of glucose molecules. A cell can split glycogen into glucose and use anaerobic metabolism (anaerobic means “without oxygen”) to make ATP. This process produces a by-product, called lactic acid, from the glucose. About 12 chemical reactions take place to make ATP during this process, so it supplies ATP at a slower rate than the phosphagen system. The system can still act rapidly and produce enough ATP to last about 90 seconds. There is a definite limit to anaerobic respiration because of the lactic acid. The acid is what makes your muscles hurt after hard and unusual exercise.

**Aerobic respiration:** By two minutes of exercising, the body responds to supply working muscles with oxygen. When oxygen is present, glucose and glycogen can be completely broken down into carbon dioxide and water in a process called aerobic respiration. Aerobic respiration uses carbohydrates first, then fats and finally proteins, if necessary. Aerobic respiration takes even more chemical reactions to produce ATP than either of the above systems. Aerobic respiration produces ATP at the slowest rate of the three systems, but it can continue to supply ATP for several hours or longer, so long as the fuel supply lasts.

**Fitness training**
There are five categories of fitness training:

1. **Aerobic fitness**
   Aerobic exercise causes you to breathe faster and more deeply, which maximizes the amount of oxygen in your blood. The better your aerobic fitness, the more efficiently your heart, lungs and blood vessels transport oxygen throughout your body – and the easier it is to complete routine physical tasks and rise to unexpected challenges.
   Aerobic exercise includes any physical activity that uses large muscle groups and increases your heart rate. Examples of aerobic exercise are walking, running, biking, swimming and dancing.
2. Muscular fitness
Strength training increases bone strength and muscular fitness, and it maintains muscle mass during a weight-loss program. You can use hand-held weights or homemade weights – such as plastic soft drink bottles filled with water or sand. You can use resistance bands, and you can use your own body weight, too – doing push-ups, and Pilates exercises, which are exercises using the weight of your body.

3. Stretching
Most aerobic and strength training activities cause muscles to contract and flex, and it is important to stretch those muscles, too. Stretching improves the range of motion of your joints and promotes better posture. Regular stretching can also relieve stress. It is best to stretch after doing exercise, when the muscles are warm and receptive to stretching. Stretching also promotes flexibility.

4. Core stability
The muscles in your abdomen, lower back and pelvis – known as your core muscles – help protect your back and connect upper and lower body movements. Core strength is a key element of a well-rounded fitness training program. Core exercises help train your muscles to brace the spine and enable you to use your upper and lower body muscles more effectively. Any exercise that uses the trunk of your body without support, including abdominal crunches, counts as a core exercise.

5. Balance training
Training can help you maintain and improve balance. This is important, since balance tends to deteriorate with age. For example, standing on one leg for increasing periods of time improves the overall stability.

Examples of balance training

Cardiovascular exercise (aerobic exercise) is important in order to maintain a healthy cardiovascular system (the heart, blood and blood vessels). Cardiovascular exercise is also referred to as aerobic exercise or simply cardio. Cardiovascular exercise involves large muscle groups such as the legs. It has many benefits. It makes the heart and lungs stronger. It also helps lower blood pressure, increase the metabolic rate and burn lots of calories for weight loss.

Building strength (muscular training and core stability) affects your body in several positive ways: The heart pumps and the lungs take in oxygen more efficiently. The capillaries supplying the muscle fibers with nutrients and oxygen increase in number and do a better job. More mitochondria (organelles that release energy) and glycogen granules (energy stores) appear in muscle fibers, and there is more myoglobin (the substance that carries oxygen in muscles). Muscle fibers increase in size and work more efficiently when you are strong, giving muscles greater strength and resistance to tiredness.
In short, exercise can benefit your health by:

- Strengthening your heart and cardiovascular system
- Improving your circulation and help your body use oxygen better
- Increasing energy levels so you can do more activities without becoming tired or short of breath
- Increasing endurance
- Lowering blood pressure
- Improving muscle tone and strength
- Improving balance and joint flexibility
- Strengthening bones
- Helping to reduce body fat and help you reach a healthy weight
- Helping to reduce stress, tension, anxiety, and depression
- Boosting self-image and self-esteem
- Improving sleep
- Making you feel more relaxed and rested
- Making you look fit and feel healthy

A Fitness Test:

Do the following 5 exercises in smaller groups and help each other to take notes. If you do not have a watch, 1 minute is gone when you have counted to 60 in a steady rhythm.

1. Walk or run 1 km  How long time did you use?
2. Make push-ups  How many could you make in 3 minutes?
3. Make step-ups  How many times can you make one step up and one step down of a flight of stairs in 3 minutes?
4. Reach your toes  Sit down on the ground and reach for your toes – how far can you reach?
5. Stand on one leg  How long time can you stand on your right leg?
   How long time can you stand on your left leg?

Keep your results.
Decide on a sport to do regularly.
It can be anything from walking 3 km every day, running, playing football or doing gymnastics.
Test your fitness every week and follow your improvements.
Month 1
I am a Youth Club member

Week 4 – Sports day at the school

Action: We organize and hold a sports day for all the classes at the school

Introduction
You have now been through the first month of the Youth Club program, and it is time for an action to share what you have learned.
You have discussed how to look at health and well-being from different angles.
You have read about the importance of doing exercises to stay physically strong, and you have tried to do a fitness test.
In this meeting, you will discuss, and agree on what shall happen during the sports day at your school.

Instruction

1) Discuss how to get a good start to the day, what you want to share with your fellow students, and how to do it. Maybe you choose to make posters on different ways to look at health and well-being. Maybe you want to include explanations on what exercise can do to the body. Maybe you want to organize that each student does a fitness test.

2) According to the number of classes and the age of the students, you decide on the types of sports and games you want to compete in during the day. It could be a football tournament between classes of the same age, different games for girls and boys, athletic competitions, relay runs etc.

3) When you have decided on the activities, you have to present your proposal to your teacher and the school headmaster, and agree on the date for the sports day.

4) Then you need to organize and do all the preparations. For this, start by listing everything that needs to be prepared on a long list, and write besides each point the names of the students who will take care of it. Maybe you need to involve a whole class of the older students in the preparations, or some students from each class, or the school’s sports clubs.
More knowledge
Some points you could consider to include
* Prepare a poster with the invitation to the sports day and how the program will run hour by hour
* Carry out an action to raise funds for the sport tournament
* Make an action to prepare the sports field
* Make a theater play to start the day
* A theater play about taking care of your health
* Ask the choir to prepare songs about health
* Prepare a multiple choice quiz with 25 questions about health and sport
* End the day with a dance competition
Week 1 – Ecosystems at work

Course: How everything in nature lives and works together

Introduction
An ecosystem includes all of the living things (plants, animals and organisms) in a given area, interacting with each other, and with their non-living environments (weather, earth, sun, soil, climate, and atmosphere).

In an ecosystem, each organism has its own niche, or role to play.

Consider a small puddle at the back of your home. In it, you may find all sorts of living things, from microorganisms to insects and plants. These will depend on non-living things like water, sunlight, turbulence in the puddle, temperature, atmospheric pressure and even nutrients in the water, for life.

Modern science has become much more aware of this corporation and interdependence of everything in nature, and respect for natures systems are growing. For many years it was believed, that Man would be able to improve agricultural yields by using artificial, or chemical fertilizer. This succeeded for a number of years. But today it has become clear, that cultivating food on big fields by use of this type of fertilizer has killed the soil. Where chemical fertilizer has been the main source of nutrients for plants, the soil has become barren and the life in the soil has died. The surface has become hard, and rain runs away.

This means, that every year the farmer needs to add more fertilizer and use even more water for irrigation.

Modern scientists have learned to respect the complicity of nature. Now they are recommending growing food by adding compost, bio char, minerals and microorganisms to the soil, which together brings life back. Soil full of organic matter gives life to micronutrients, which in turn breaks down the plant residues to minerals that plants can absorb. Worms come back. Worms and roots of many different types of plants create corridors for water to stay in the field instead of running away. The ecosystem of the field is at work.

Instruction
1) The teacher presents the introduction and uses the “More knowledge” to give more examples on how ecosystems work. He draws the pictures on the blackboard.
2) In Trios, come up with examples of ecosystems, and make a drawing of your example.

3) If possible, visit a farmer who uses sustainable farming methods, and learn from him, or her, how this benefits the soil and the production of food.

More Knowledge

Ecosystems vary in size. They can be as small as a puddle or as large as the Earth itself. Any group of living and nonliving organisms interacting with each other can be considered an ecosystem.

Within each ecosystem, there are habitats, which may vary in size. A habitat is the place where a population lives. A population is a group of living organisms of the same kind, living in the same place at the same time.

All the populations interact and form a community. The community of living organisms interacts with the non-living world around it to form the ecosystem. The habitat must supply the needs of organisms, such as food, water, temperature, oxygen and minerals. Life substances are recycled in the ecosystem. If the population’s needs are not met, it will move to a better habitat or die out.

Biomes are ecosystems, where several habitats interact. The Earth itself is one large biome. Smaller biomes include deserts, tundra, grasslands and rainforests.

The energy cycle

The process of photosynthesis, by which green plants use energy from sunlight to convert water and carbon dioxide into oxygen and organic compounds, is the basis for all life. Plant sugar and oxygen are created in the green parts of a plant, and every animal on earth depends on it. Here is an illustration that shows how it happens:
Plants absorb a common gas called carbon dioxide, pull water up through the roots and use sunlight to make sugar. Plants use the sugar to grow. Plants give off oxygen as a by-product. The green parts of the plants produce sugar and oxygen. This takes place in the process of photosynthesis:

Carbon dioxide + water + sunlight = sugar + oxygen

**Photosynthesis, by which green plants use sunlight energy to convert water and carbon dioxide into oxygen and organic compounds, is the basis for all life.**

Sugars, which are the first products of photosynthesis, are converted into starch, protein, oil, cellulose, lignin and thousands of other chemical compounds. Before plants appeared on Earth, the Earth’s atmosphere was high in carbon dioxide and contained no oxygen. Photosynthesis is the source of the oxygen, which we breathe. The present atmosphere contains about 0.039% carbon dioxide and 21% oxygen – thanks to photosynthesis.

The exchange of carbon dioxide (produced by animals and plants) and oxygen (produced by plants) is a process of conservation. The waste of one species becomes the food for another. An average hectare of maize produces enough oxygen per hectare per day in midsummer to meet the respiratory needs of about 325 people. This means that one million hectares of corn produce enough oxygen for the annual respiratory needs of 10 million residents in about 11 summer days.
Plants, as well as a number of microorganisms, are the only living organisms that can make their own food (this is one of the main ways of deciding if something is a plant). Plants are food for all other living organisms. All parts of the plant can be eaten: leaves, seeds, fruits, roots, nuts and flowers.

The energy flow through living organisms starts with sunlight and photosynthesis, and then it travels through the food chain as in the following example:

1) **Primary producers** – they are the green plants and certain types of bacteria and algae that produce usable energy for the rest of the living organisms on earth. They use energy from the sun to make sucrose, glucose and other compounds that different life forms can eat and “burn” for energy. In each one of those sugar molecules, a little bit of the sun’s energy is stored in a form called chemical energy.

2) **Herbivores** – they are the plant eaters. They have the ability to digest the plants they eat and release the energy stored in the plant cells for their own use. Sometimes scientists call this level of the food chain the primary consumers.

3) **Carnivores** – are the meat eaters. Predators and scavengers are in this group. Sometimes this level in the food chain is referred to as the secondary consumers. They eat the animals that eat the plants, and sometimes they eat each other. Most of these animals cannot eat plants at all. They would starve to death if it were not for the herbivores digesting the plants first.

4) **Decomposers** – are the organisms that eat up dead organic matter from plants and animals. They are mostly bacteria and fungus, but also include maggots, dung beetles, earthworms and the like. They are just like carnivores and herbivores, because they also have to get their energy from the cells of animals or plants.

5) **Omnivores** – are creatures that can live from plants as well as animals. Humans are considered to be omnivores, although discussions are going on to clarify whether humans originally were herbivores.

As energy moves up the food chain there is less and less of it for the next step in the food chain to eat. Most of the plant energy that is consumed by an herbivore is used by the herbivore to keep itself alive; eating, breathing, walking, running and staying warm, and much energy is lost as heat to the surroundings. Only a little is left for the carnivore or decomposer that eats the herbivore. That is the main reason why there are not very many big predators compared to herbivores. There is simply not enough energy for them.
Illustration of a food web, where the energy goes from green plants to herbivores (big and small) to carnivores.

Think about this!

If all the grain currently fed to livestock in the United States were consumed directly by people, the number of people who could be fed would be nearly 800 million, reported David Pimentel, professor of ecology in Cornell University’s College of Agriculture and Life Sciences, August 1997.

The main reason is that cattle consume 16 times more grain than they produce as meat.
Week 2 – Why is the climate changing?

Lesson: The influence of man on earth’s climate

Introduction
Climate Change is a change in global or regional climate patterns, in particular a change apparent from the mid to late 20th century onwards and attributed largely to the increased levels of atmospheric carbon dioxide produced by the use of fossil fuels.

Climate is usually defined as the "average weather" in a place. It includes patterns of temperature, precipitation (rain or snow), humidity, wind and seasons. Climate patterns play a fundamental role in shaping natural ecosystems, and the human economies and cultures that depend on them.

But the climate we have come to expect is not what it used to be, because the past is no longer a reliable predictor of the future. Our climate is rapidly changing with disruptive impacts, and that change is progressing faster than any seen in the last 2,000 years.

According to the report, “Preparing for a Changing Climate” from USA, rising levels of carbon dioxide and other heat-trapping gases in the atmosphere have warmed the Earth, and are causing wide-ranging impacts, including rising sea levels; melting snow and ice; more extreme heat events, fires and drought; and more extreme storms, rainfall and floods. Scientists project that these trends will continue and in some cases accelerate, posing significant risks to human health, our forests, agriculture, freshwater supplies, coastlines, and other natural resources that are vital to our economy, environment, and our quality of life.

Instruction
1) The Youth Club leader presents the lesson and you read the “More knowledge” together.
2) Write new expressions on a list on the blackboard while you read.
3) Help each other to explain the words. Go back to the text, if you need help.
4) Discuss how Zambia has experienced Global Warming and Climate Change.
More Knowledge

Global Warming is happening

Burning of fossil fuels in the form of coal, and oil has only taken place during the last 150 years. When coal and oil burns, CO₂ is released into the atmosphere. This forms a shield that is stopping rays from the sun to travel back to the universe. In 1970 scientist gave the first warnings that CO₂ in the atmosphere was increasing, and that this was causing temperatures on earth to rise at a much faster rate than at any other time.

Global Warming and climate change has happened many times before in the history of the Earth. 13,000 years ago, ice covered much of Europe and North America, and the world was 5 degrees colder than today.

Since then, however, the temperatures have been relatively stable, giving plants, animals and human societies a mostly predictable and hospitable planet to live on.
Past changes in temperatures have been caused by small changes in the amount of sunlight that reaches the lands and the oceans, as the orbit of the Earth around the Sun fluctuates slightly over long periods of time. Likewise, the living Earth with its plants and animals influences the temperatures, as plants remove CO₂ from the atmosphere, and forest fires, microbes and animals return CO₂ to the atmosphere, mostly with the effect of stabilizing temperatures to a level favorable for life.

Many scientists have tried to predict how temperatures will change over the next 100 years, and the UN has set up an Intergovernmental Panel on Climate Change (IPCC). The IPCC predicted in 2007, that temperatures would have risen between 2 and 6 degrees by 2100. The IPCC, however, did not want to include in their predictions the events and effects, they were not very sure about. Thus, they did not take into consideration the effect of the melting of the North Pole ice until after 2080, while the ice will most likely all have melted by the summer of 2030. Neither did they include the full effect of deforestation as it happens around the world, because of logging and expansion of farming, nor the fact that the oceans, which absorb and store some of the CO₂ from fossil fuel burning, are less and less able to do so as the level of CO₂ in the sea water increases. Thus, if we add up all this, it is likely that the highest prediction of how much the earth will warm, – plus 6 degrees in 2100 – will come true. This is also confirmed by recent measurements that point to the fact that temperatures, and CO₂ levels are increasing faster than in even the most extreme predictions made by the IPCC.

Climate changes caused by Global Warming

The climate of a country is determined not only by average temperatures, but also by changes in temperature between the seasons, by the amount of rain in different seasons and by winds. The climate determines which plants can grow, and which animals can live in an area, and is thus of greater importance to people and communities, than the temperature.

If the average temperature of the Earth warms by 2 degrees Celsius by 2040, some areas might get much warmer, while the oceans, which cover 70% of the Earth, may warm only 1 degree. Inland areas of Africa will become 3-4 degrees warmer. When temperatures rise, the land will become much dryer, because the heat evaporates water from the soil, and leaves the soil hard baked. A large increase in rainfall is needed for the soil to remain as moist as before. There will be more rain, because more water will evaporate over the oceans. But most of Africa, Asia, Australia and Latin America will get a drier and less hospitable climate. More of the rain falling in a warmer world will come in violent storms that result in more flooding and destruction of crops, because higher temperatures will produce stronger winds. Especially
South and Southeast Asia, Western South America and Eastern Africa will see many floods. The higher temperatures will melt glaciers on mountains, and in polar areas that have been frozen for thousands or millions of years, leading to rising sea levels that will eventually flood low-lying coastal areas.

**A cold summer or winter does not contradict Global Warming**

It is important to realize that Global Warming must be measured on a global scale, and over decades. It is not possible to take the temperatures of a single year in a certain country, and say anything about climate change based on this. The climate is measured over many years, since there will always be variations between individual years. One needs to look at the average temperatures during the whole year, and from all over the world. With such measurements, taken from more than 1,500 weather stations, there is no longer any doubt. The first decade of the 2000s has been the warmest decade since the registration of global temperatures started 150 years ago. Five of the years of this decade are among the warmest ever recorded.

Hereunder you can see a chart illustrating the forces at work.

In the next lesson, we will discuss what we humans can do to improve the situation, and what you can do locally.
Week 3 – Ways to safeguard our environment

Lessons: Fighting Global Warming by stopping wildfires and planting trees

Introduction
In the last lesson, you studied why Global Warming and Climate Change is happening. In this lesson, you will look at what can be done locally to reduce emission of CO2 into the atmosphere. Of course, it is the responsibility of governments and international organizations to make the laws that guide how a country shall cut down the CO2 emissions, by reducing the use of fossil fuels such as oil and coal in industries and for generating electricity, and this is where the biggest difference can be made. But everyone needs to know that Global Warming is happening, and to do whatever they can to protect their local areas as well as possible.

Why protect our natural areas?
There are many reasons why we should protect the nature around us. One reason is that we do not have the right to destroy nature just because we have the power to do so. We humans are just one of the 10-15 million different species on Earth, and other organisms have the same right to exist as we do. Why should we care if some, or all these other species disappear forever? One very obvious reason is that we humans need nature - in fact, we totally depend on it. There are numerous historical examples of past civilizations that disappeared because they did not manage their natural resources well, such as the Mayans, the people of Easter Island, or the Viking settlers on Greenland.

The plants and trees are the basis for nearly all other forms of life, and it is therefore essential to preserve healthy, and diverse vegetation. The greater the number of species living on earth, the more stable the global environment is. This means that natural systems are better able to survive the global environmental changes that occur regularly. And we need these natural systems in order to purify the earth’s water and air. As natural environments are degraded, the water purification cycle is destroyed, and topsoil that has been built up over centuries is eroded and washed out to sea. Because of Climate Change, maintenance and restoration of a healthy environment becomes even more urgent.
**Instruction**

1) The Youth Club leader introduces the lesson, and looking at the pictures, you go through the “More knowledge” together.

2) For each picture, discuss your local experiences of damages caused, or benefits gained.

3) Discuss how to share the knowledge on how to protect our environment with your family and friends. To know more will make it possible for farmers to protect their land against erosion, and encourage families to establish wood lots for getting firewood.

**More Knowledge**
In the pictures below, you can see what farmers and communities in Zambia are already doing to improve the environments ability to protect itself, and us, against the effects of Global Warming and Climate Change.

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**Deforestation** accounts for 20% of global warming. It is therefore necessary to show farmers alternatives to slash and burn farming. And promote tree from which they can generate income.
Planting trees for firewood in Africa
1 tree stores over 15 years: 1.8 tons CO₂
1 tree in Africa per year: 0.1 tons CO₂
50 trees can supply a family with firewood

Thousands of farmers in Zambia have been mobilised to plant and let new Msangu trees grow up in their fields. They enrich the soils, and yields are better under the trees.
Zambians at DAPP projects have built thousands of these stoves that save more than 1/3 of the firewood.

1 stove saves over 1 ton firewood/year
1 stove reduces emissions with about 2 tons CO$_2$/year

This Rocket Stove in Children’s Town, Zambia, saves over 50% firewood
Avoid bushfires. Farmers Clubs and other HPP projects mobilise people only to use controlled fires. 3-4 T CO₂ will then be stored annually in trees, roots and soils.

Farmers are also sensitised to use permanent fields instead of slash and burn farming. This reduces labour, preserves biodiversity and reduces emissions of CO₂. Preventing burning of forested land saves 100-200 T CO₂/ha.
Contours of vetiver grass reduce loss of nutrients and more water penetrates into the soil. But they also store carbon since they continue to grow for up to 50 years.

Root system of 2-year old vetiver grass in China. It is estimated that 1 km of vetiver row (8,000 plants) stores 2 tons CO$_2$/year more than what would occur otherwise.
Conservation Farming, here in Zimbabwe, not only preserves nutrients and water. 1 hectare annually stores $\frac{1}{4}$ to $\frac{1}{2}$ t CO$_2$.

Community preserved areas, here in Zambia, similarly store 3-4 T CO$_2$/ha annually by preventing fires and felling.
Month 2
Our local environment

Week 4 – Our permanent tree nursery

Action: Collecting seeds and seedlings, and establishing tree nurseries at school and at home

Introduction
This month has been about Global Warming, and what can be done locally to protect against some of the consequences of Climate Change. Planting trees is something that will be very helpful and can engage the whole community. It is not expensive, as seeds and seedlings of wild trees and of cultivated trees can be collected free of cost. It takes some work to raise the seedlings in the nursery, look after them with water and shade, to plant them when they are big enough, and look after them until they are old enough to take care of themselves.

But it is worth it. Just think of all the benefits you get from trees:

- Shade
- Fuel
- Fruits
- Protection against wind
- Improvement of the soil’s capacity to receive rainwater
- Timber

- If you become a skilled tree gardener, you might have a way to earn an income from selling tree seedlings.

Instruction

1) Read the introduction and the more knowledge. Take notes.
2) Agree with the school on a place to make the nursery.
3) Decide on an action to collect seeds and seedlings. Learn the names of the local trees and what they are good for. Decide which trees to plant.
4) Follow the instruction in the “More knowledge” when you prepare the nursery, and sow and plant the trees.
5) Make a plan for how to take care of the nursery.
6) When the trees are ready to plant, decide where to plant them.
More knowledge

Production of Trees - Introduction
New trees can be produced using the following methods:
1. In a tree nursery in polythene pots, or old soft drink cans
2. In a nursery using seedbeds,
3. By planting seeds where you want trees,
4. By planting wild seedlings found under mature trees in nature,
5. With plant cuttings.

Growing seedlings

Site selection
A nursery should be located near a water source, on flat land. It should also have a wind break, some shade trees, and not be waterlogged.

Fencing
The nursery must be fenced in order to protect the tree seedlings from animals and chickens. Use grass and poles, thorny bushes as a start, maybe plant live trees to serve as a fence at the start of the rainy season.

Nursery beds
The beds should be one m wide and should be separated by walkways 60 cm wide. A bed 1 m x 5 m can accommodate from 500 to 1000 seedlings. So 10 m x 10 m will be sufficient for at least 10,000 seedlings.

Type of soil to use
The polythene pots or the seedbeds can be filled with a good layer of topsoil. The best soil is found under big trees (acacias) or near dams/rivers. If the soil contains much clay (it can be easily formed into a ball when wet), you should mix the soil with sand. If the soil is not very fertile, then you should mix it with manure. Never mix more than one part of manure to ten parts of soil because the manure can burn the tree seedlings.

How to fill the pots
The bottom layer must be pressed hard; the middle layer should be slightly pressed and the top layer quite loose. The soil is pressed hard at the bottom in order for the soil not to fall out during transplantation.
If you have no polythene pots, you can use any available container, such as cans (tins) or milk cartons. Remember to make several small holes in the base so that excess water can run out.

Sowing the seeds
Seeds can be sown directly into pots or seedbeds. If you are using pots, it is best to sow at least three seeds per pot. Seeds sown in seedbeds can later be transplanted to pots or even directly to the field (bare root planting). Cover the seeds with a layer of soil that is twice as thick as the seed itself. This means that the bigger the seeds are, the more soil will be needed for covering.

Shading (protection from the sun)
The seedbed or pots should be covered with a thin layer of grass after sowing to protect against the sun and heavy
Pruning of seedling roots

Rainstorms. A thick layer of grass is bad for germination (the stage where seeds start growing into tiny plants). When the seedlings have germinated you should build a shade at a height of 60 cm above the seedlings to protect them from the sun and strong rains.

Seed collection
Many seeds can be collected locally from existing trees. It is best to collect seeds from good and healthy trees. Seeds from any ripe fruit can be washed and then sown fresh or dried in the shade.

Seed treatment
It is important that the seeds are treated correctly before sowing, or they may take a long time to germinate or germinate poorly. There are basically two different treatments:

Cold-water treatment:
Leave the seeds in cold water overnight before sowing. This applies to most fruit tree seeds and some other soft seeds.

Hot water treatment:
Heat some water close to boiling (the volume of the water must be twice the volume of the seeds). Put the seeds in the hot water and leave them to soak overnight.

Watering
While the seeds are germinating and the seedlings are small, they must be watered daily. After this phase, watering every other day is sufficient. Use a water can or sprinkler made from a plastic container with small holes in it. Do not over-water as this can cause fungal diseases. Keep the pots or seedbeds free from weeds at all times.

Transplanting
Seedlings can be transplanted from seed beds when they are 3-5 cm tall. Transplant them to pots or another seedbed for bare root planting, keeping a distance of 5 cm x 5 cm between each plant. Water the seedlings and water the pots. Lift the seedling and make sure that the root will not be disturbed. Make a planting hole with a finger or a stick. Make sure the hole is bigger than the root. Press the soil firmly around the plant. Water again and give full shade to the seedlings for three days.

It is good to separate pots by size to make correct watering easier. Take away the empty pots where seeds did not germinate or where transplanted seedlings died. Re-sow or plant in these pots.

Root pruning
Eliminate small roots protruding from the pots by simply lifting the pots and breaking the roots by turning the pot around or by cutting the roots with a knife. This will give the seedling a denser root system that can better survive being moved. Without pruning, the roots will grow under the pots. This can cause difficulties during transplanting, as roots may be damaged or
break. Before and after root pruning, the seedlings must be well irrigated. Give full shade to the seedlings for 2-3 days.

Tree seedlings in cans. The seedlings in the cans can be placed in the soil where you want the tree to grow. The roots will break through the cans.

Water gently. A bottle with holes will do as a sprinkler.
Week 1 – Water is life

Course: Why we need to drink water, and how to keep water clean

Introduction
Water is essential for normal functioning of the human body.
Water is life.
You cannot survive without water. Water is essential for all living things. But, the water has to be clean, without dirt or bacteria.
It has been discovered that many bacteria live in water and are spread by water. Some of these are harmful for humans. Chemicals also dissolve in water, and again, some of these are not good for humans. We can only avoid harmful bacteria and poisonous chemicals, if we make sure they are not in the water we drink.
Why can water be dangerous even when it looks clean? Because you cannot see bacteria and dissolved chemicals!
In this course, you will learn how you can clean water for drinking. You also need clean water for cooking and washing vegetables.
It is not always possible to get water from a safe source. Often, the water used in the community comes from unsafe sources. To take control of community health, it necessary to know where and how people get water.
Let us work together to find out about the sources of drinking water in our community – and where the water is not clean, let us find out what we can do about it.

Instruction

1) The Youth Club meeting starts with a song on the importance of water.
2) In Trios, list the water sources that are available in your community and in your homes. Which problems do you have with getting clean drinking water?
3) Share your observations with the whole Youth Club.
4) The Youth Club leader/teacher presents different methods for cleaning water.
5) The Trios try some of the methods
More knowledge

What WHO and UNICEF tells us about the meaning of having “access” to drinking water:

Universal access to safe drinking water is a fundamental need and a human right. Securing access for all would go a long way in reducing illness and death, especially among children. Water is fundamental for all living things. Humans use water to drink, to cook, to wash, to clean and to irrigate their fields. In rural areas, most women use many hours to ensure that there is enough water for the family.

Ideally, all drinking water should come from a reliable source, so that we are sure it is clean. In most towns, water from the municipality has been cleaned with chlorine, or treated in other ways before it is distributed. But, if that is not possible, the safest way to secure clean drinking water is to treat it at home. Access to clean drinking water becomes even more important for children, people with AIDS, and when there are cases of diarrhea or cholera.

It is often possible to clean water that is otherwise not suitable for drinking, but in some cases, it is not.

- To have ‘access to water” means, according to WHO, that the source is less than 1 kilometer away from its place of use, and that it is possible to get at least 20 liters of clean water per day, per person;
- Drinking water is water with microbiological, chemical and physical characteristics that meet WHO’s guidelines, or the national standards for quality of water;
- Having “access to clean water” means being able to use improved drinking water from sources such as: treated surface water, untreated but uncontaminated water from protected springs, bore-holes or sanitary wells, protected dug wells or rainwater;
- Unsafe water comes from unprotected dug wells, unprotected springs, surface water (rivers, dams, ponds, streams, canals or irrigation channels).

Different ways to clean water

Different methods can be used to clean water. Here is a description of four different methods.

1. Sedimentation: It is possible to remove sand and dirt from water, by letting the water stand in a container for 3 days. After 3 days, all the dirt has accumulate at the bottom of the container. Before drinking, the water should be collected from the top without disturbing the layer of sediment at the bottom (which has to be thrown out afterwards). This method can be used, if the water is not clear.

2. Boiling: Taking into account that the sedimentation method can only get rid of sand and dirt, but cannot eliminate all harmful microbes, the water should also be boiled. Clear water taken from an unsafe source should also be boiled.
   - Put the water in a pot on the stove.
   - When it starts to boil, let it continue to boil for some minutes.
   - Let the water cool before drinking it.
   - Store in a closed bottle or a pot with a lid.
3. Filtration: In this method, water runs through a filter that traps the dirt. There are ready-made water filters, but an alternative is to make a homemade filter. It can be made by letting water run through a container as shown on the picture, filled up with: a clean cloth in the bottom, then reeds, with pebbles and sand on top of it. This water filter also does not eliminate microbes, but it is a method that can be used in emergencies. It is advisable to boil or chlorinate the water after the filtration.

4. Solar radiation: Ultraviolet rays in sunlight are capable of destroying microorganisms. These rays can go through glass or clear plastic bottles. 6 hours of normal sunlight will disinfect surface water so that it is drinkable. Solar radiation does not kill all bacteria, but it destroys the bacteria causing diarrhea, cholera and typhus. If the temperature gets over 50 degrees for just one hour, many other parasites like worms and amoebae are also killed. It is therefore good to place the bottles on a black surface that attracts heat.

- Get some bottles of glass or clear plastic.
- Clean the bottles and the caps.
- Fill the bottles halfway up with water.
- Close and shake at least 20 times to get air into the water. The oxygen helps to kill the bacteria.
- Fill up the bottles completely with more water and close tightly. (There should not be any air left inside, as bubbles will reflect the sun).
- Place the bottles lying down in a sunny place, on a roof, or on top of a black surface with a high temperature.
- Leave the bottles in the sun. There has to be sunshine for 6 hours.

5. Chlorination
When there is a cholera epidemic in a community, it is necessary to pay more attention to the treatment of drinking water. It would be ideal if all families had the possibility to boil water, since the bacteria that causes cholera (Vibrio) is easily destroyed by boiling. But, when there is no possibility for boiling water, you can use chlorine to treat it. The Vibrio and other microbes die from contact with chlorine. Chlorine for water cleaning is commonly for sale. Read the instruction on the packet carefully to make the correct solution.
Week 2 – The 10 Ground Rules of Hygiene

Lesson: Taking the 10 Ground Rules of Hygiene to our hearts and sharing them

Introduction
Take a look at “The 10 Ground Rules of Hygiene”.
What do you say? Are they good? Are they enough?
Are they possible to implement?
Are you implementing any of them now?
Are there any of them you think are impossible to implement?

It is the Youth Club’s tasks to understand each rule, and to find ways of how all, or at least most of them, can be implemented at home and at school.
What will it take to explain the rules to the people involved, and convince them to use new systems or materials, and new ways to do things?
Discuss how to do it at home. Discuss how to do it at the school.
Write down your arguments for each of the 10 rules.

Here are examples of arguments you could use for rule No 6: Keep Control of Garbage. “Having a good garbage system at our school is important. First of all, we want our school to look nice, and not have old and dirty stuff lying around. But even more important, to have a good garbage system is HEALTHY!”
“Why is this?”
“It is because when you have garbage lying out in the open, rats, mice, and other animals will come and eat it. Tiny worms, parasites, and bacteria that you cannot see, will also come and eat the garbage, and live in it. These animals and organisms will multiply in the garbage, and they carry with them diseases that make us sick, such as diarrhea.”
Exactly the same reasons count in your home.

Instruction
1) Work with the “10 Ground Rules of Hygiene” by answering the questions raised in the introduction, and by giving reasons for each rule.
2) Work in your Trios and the whole club together.
3) Learn the “10 Ground Rules of Hygiene” by heart.
4) Make some “healthy hygiene slogans” that you can use when you present the rules to the other classes at the school. Here are 3 examples of what is
meant by a slogan: NO to stagnant water! YES to clean water! Wash hands to stay free of diarrhea!

5) Discuss on actions to take in your family to improve hygiene, and on how you will share the “10 Ground Rules of Hygiene”.

More knowledge

The 10 Ground Rules of Hygiene
1. Hand washing prevents the spread of diseases
2. Wash and clean more often when caring for sick people
3. A clean latrine for every family
4. No dirty or stagnant water
5. Keep food clean and covered to avoid insects and rodents
6. Keep control of garbage!
7. Clean means CLEAN
8. Know your water, know how to clean it, and know why
9. Keep animals and people separated
10. Avoid contamination of stools (this means feces)

Rules for washing hands
- Wash your hands often!
- It is very important to use SOAP to wash your hands, because soap kills germs. Many people wash their hands with just water, but few use soap.
- Ash can also be used to scrub your hands, if you do not have soap.
- Wash your hands with running water.

Train to wash your hands systematically by following how it is shown in this picture

A good rubbish system
1. A garbage pit for trash you cannot use
Choose the place where you will have your garbage pit. The area must be as far away from the house as possible, and to the leeward side, meaning that the wind will usually blow the smell from the garbage pit away from your house.
The area should be at least 10 meters away from your house, from your water supply, and from the places where you cook and eat.

Now you are ready to dig the pit for trash like old paper, plastics, cans and other materials that cannot be used for compost or be sold for re-use. Dig a hole, 1 meter long, 1 meter wide and 2 meters deep. It is a good idea to organize the work as a joint action with your family, to have many hands helping to dig and remove the soil from the pit. Keep a pile of the soil beside the pit.

Once or twice a week, you make fire in the pit to burn as much of the garbage as possible. Each time you burn the garbage, you cover the remains with a thin layer of soil. Finally, when the garbage pit is filled up, you cover it with soil for the last time, so that it is in level with the rest of the land and not visible. After that, you dig a new pit near the old one.

2. Other kinds of garbage

Food scraps from plants — maize, porridge, rice, beans, and boiled vegetables: These food scraps are very good for chicken or pig feed. If you do not yet have animals, you could give the leftovers to a nearby farmer in return for some eggs or chickens.

Vegetable and fruit cut-offs: These go into your compost heap for the garden.

When you separate the garbage like this, you reduce the space you need for garbage, and you produce very good compost as well.

3. Fence the garbage area

Make a fence around the garbage area using local materials, such as branches or grass. In this way, the garbage area looks nice, people will easily know where the pit is located, and you will keep out dogs and other animals.

A healthy village
Week 3 – Diarrhea – the cause for many days of absence from school

Introduction
When a person has loose or watery stools, he has diarrhea. If mucus and blood can be seen in the stools, he has dysentery. Diarrhea can be mild or serious. It can be acute (sudden and severe) or chronic (lasting many days).

People of all ages suffer from diarrhea. It is usually easy to cure, but it can be dangerous in young children, especially those who are poorly nourished.

Diarrhea has many causes. Usually, no medicines are needed, and you get well in a few days. Occasionally, special treatment is needed. However, most diarrheas can be treated successfully in the home, even if you are not sure of the exact cause or causes.

THE MAIN CAUSES OF DIARRHEA:
- Eating spoiled food or drinking dirty water can cause a bacterial infection.
- Eating too much unripe fruit, or heavy, greasy foods.
- Shortage of water and unclean conditions (no latrines) spread the germs that cause diarrhea.
- Attack by an airborne virus infection or ‘intestinal flu’.
- Poor nutrition or other diseases make diarrhea more frequent and worse.
- Worm infections.
Instruction
1) Start the lesson by reading the introduction and make a list of people you know who have suffered from diarrhea within the last 3 months.
2) Discuss what might have caused the diarrhea.
3) Read the “More knowledge” to learn more about how diarrhea spreads, how to avoid diarrhea and how to treat it.
4) Discuss what it will be good to share with the rest of the school during the school cleaning action you are going to plan next week, and how to do it.

More knowledge
Here is a more detailed explanation about diarrhea and how to treat it

A simple story about how germs travel
1. A man has diarrhea outside.
2. A dog eats the man’s feces.
3. A child plays with the dog and gets feces on his hands.
4. The child starts to cry and his mother comforts him. He wipes his hands on her skirt.
5. The mother cooks. The germs on her skirt get on her hands. She serves the food with her hands.
6. The family eats the food.
7. Later, the whole family has diarrhea.

How to treat diarrhea
Bad hygiene or eating spoiled food often causes diarrhea. When you have diarrhea, you lose a lot of water in your body and you get dehydrated. This is dangerous and, therefore, you need to know how to make an oral rehydration solution that you can drink, or give to other people with diarrhea.

How to make a rehydration drink
1. Boil water for at least 3 minutes to be sure it is clean.
2. Put a liter of boiled water in a clean jug.
3. Put precisely half a teaspoon of salt in the hot water.
4. Put precisely 8 teaspoons of sugar in the hot water. Do not put more sugar, because this will worsen the diarrhea.
5. Stir and let the sugar and salt dissolve.
6. Leave the mixture to cool.
7. Taste the liquid. It should not be saltier than tears. Add a little more boiling water if the solution is not fit to drink.
8. Give the dehydrated person sips of this drink every 5 minutes, day and night, until she begins to urinate normally. A large person needs three or more liters per day. A small child usually needs at least 1 liter per day, or one glass for each watery stool. Keep giving the drink, even if the person vomits. Not all the drink will be vomited.
9. Get the sick person to the doctor if she does not improve.

About Dehydration
When a person has diarrhea, the body loses more water and minerals than it receives. This happens mainly when the diarrhea is persistent, and vomiting will make it worse. The loss of water and salts has these effects: the volume of blood is reduced, which makes the heart beat faster to compensate; the production of urine and tears is reduced; the mouth and tongue become dry; the skin loses its elasticity.

If the dehydration worsens, and the heart cannot beat fast enough to keep the blood flowing, (low blood pressure), the person becomes inactive and may collapse due to circulatory shock - and die.

**All persons with acute diarrhea are at risk of dehydration. Severe dehydration may lead to shock and cause the death of the patient.**

Signs of dehydration:
It is very important that all people know the signs of dehydration and what needs to be done to prevent and treat it:
- thirst is often the first, early sign of dehydration
- little or no urine, the urine is dark yellow
- sudden loss of weight
- dry mouth
- sunken, tearless eyes
- sagging in the ‘soft spot’ in infants head
- loss of skin elasticity
- a child with dehydration is often agitated and irritable

Severe dehydration can cause rapid and weak pulse, rapid deep breathing and lead to shock.

Treatment at home
**GIVE PLENTY OF FLUIDS.**
Anyone with diarrhea, **even without dehydration**, should take more liquids than normal to prevent dehydration. You can prepare and use several homemade drinks, for example:

**Cereal Drinks:** Cook rice (powdered rice is best, or finely grounded maize, wheat flour, sorghum, or cooked and mashed potatoes) in water and add salt. For 1 liter of water use 1/2 teaspoon salt and 2 handfuls of powdered serial. Boil for 5-7 minutes to form a watery porridge. Cool the drink and serve it. (Drinks made of grains can ferment in hot temperatures. Test the drink before giving it to the sick person, especially children, to make sure it has not spoiled).

You can also serve weak tea, juices and even plain water.
Week 4 – Cleaning action at the school

Action: We, the Youth Club, take charge of health for all at our school

Introduction
You have learned about the 10 Ground Rules of Hygiene, the importance of washing hands, why drinking water needs to be clean, and different ways to clean water. In this action, you will share your knowledge with all the children at the school, and work together to make the school clean and inviting.

The school is there for you. You are the ones who are using all the facilities, from classrooms, to toilets, to sports ground. The only way to keep everything in good order is by agreeing among all the students on how you want things to be, and making a good plan for maintaining it. Even if there is not a lot of money for maintenance, there are many things you can do to make your school a good place to study.

Instruction
1) Read the introduction and discuss how you, the Youth Club, can take charge of making the school a good place for everyone to enjoy.
2) List all the facilities you have at the school and discuss how you would like them to look. Make use of the “More knowledge” to get an idea of how to get started.
3) Make your plan of what, in your opinion, needs to be done.
4) Make a plan for how to share your ideas with the rest of the school, and mobilize all the students to participate.
5) Make a plan for what you would like to get done in a common action, and plan who shall do what. Maybe each class with their teacher gets a task. If you cannot do everything in one action, you could plan to have another action next month.
6) Figure out what material is needed, and plan how to get it. Maybe the school has some tools, maybe each student has to bring something from home, and maybe you can ask for something from the local shops.
7) Present your plans and proposals to your teachers and the headmaster and agree on a good time for the action.
More knowledge

Are the facilities at our school, as we would like them to be? Look at them one by one. Maybe take a tour around the school to look at everything with new eyes.

The classrooms
How are the walls looking? Do we need to scrape down loose paint? Is the furniture in order? Is the room clean? Are there any decorations, or what could we find to decorate the walls? Is there anything lying around, that should not be there? Are the windows frames clean? If each class has a classroom, you could ask the classes to decide how they would like their classrooms to look, before the action starts.

The toilets
Are the toilets clean? Is there water available for washing hands? Can the doors be locked? Are there toilets for boys and girls? Is there a system for girls to dispose of hygienic pads? Does everyone respect not to disturb a person using the toilet? What rules and systems should we make, how to maintain them and keep a good standard in the toilets at all times?

The outdoor areas
Is the school compound clean and orderly? Are there different places that can be used for different activities like skipping, sitting, or other things you would like to do in the breaks between classes? Are there spaces with flowers? Are there trees?

The sports ground
Has the grass been cut? Is it necessary to sow more grass? Has stones been removed? Is the place where sports equipment is kept, in good order?

Other facilities
If the school has other facilities like workshops for vocational training, a library, a kitchen or a place for eating lunch, ask the same question about each of these.
Week 1 – Reproductive health

Course: The reproductive systems of men and women

Introduction
Where do we come from?
Where do our parents come from?
Where did the first people on earth come from?
You grow up hearing many different explanations and stories surrounding the origin of human beings. Some stemming from different religious viewpoints and beliefs, and others stemming from a scientific viewpoint and understanding.
But that is not what this lesson is about.

By now, you know that you are children of your father and mother, and that you are born from your mother. As you grow up, you will most probably also have your own children.

The main purpose of the reproductive system is to create new life. The reproductive system of humans is comprised of the male and the female sex organs. There are internal and external organs for both male and female. The new life is created, when a female egg cell and a male sperm fuse together. The female sex organs will then take care of the new life until the child is born.

The eggs cells are made in the female ovaries and the sperm cells are made in the man male testicles. The ovaries and testicles also produce sex hormones. Common problems of the reproductive system include infertility, sexually transmissible infections (STIs), painful periods, impotence and prostate problems.

In this lesson, you will learn how the male and female reproductive system functions. You will come to understand more about how your father and mother managed to bring you into this world. Your time will soon come to bring your own children into this world.

Instruction
1) The teacher presents today’s course, using the introduction, and the “More knowledge” for this course.
2) In Trios, List the new words you have learned. Put up questions you want answers to.

3) Question and answer session. You hear the questions from the Trios and try to answer them together. If there are any questions you cannot answer, decide to ask a health care worker from the local clinic for help.

4) For your own life, what are the most important points from this lesson?

5) The Club discusses and writes the three most important points on the blackboard.

More knowledge
Almost every person growing up has wondered where they come from. If you are learning with us today, then you are probably on your way to be a grown up person and hopefully you will understand this interesting and exciting subject, and you will learn to be more responsible in your boy/girl activities. Reproduction generally means the action or process of making a copy of something. Human reproduction, specifically, is a wonderful, natural instinct of humans for making new humans (babies). Reproduction is necessary for continuity of any species. This means, that without it, there will be no replacement when we grow very old and die, and humans will no longer exist.

There are two types of reproduction of living things – sexual and asexual. Sexual reproduction involves two individuals of the same species, of different sex, a male and a female. Asexual reproduction can occur without the involvement of two different sexes, and this is usually found in single cell organisms and in some plants. Human reproduction is the sexual reproduction type involving a male and a female, and traditionally, the interaction of both male and female organs start the process. Let us start by looking at the female reproductive organs.

The female reproductive system
The human female reproductive system is made up of the ovaries, egg tubes, uterus, cervix and vagina. All these are vital parts of the reproduction process. Below is a diagram of how the parts are placed in the female body.

Egg tubes (Oviduct)
Eggs are formed in the two ovaries. The egg tube, also called the fallopian tube or oviduct, is the vessel through which egg cells travel to the uterus. Each ovary is connected to the uterus by an egg tube. A woman releases a mature egg every month. There are very tiny hairs in the fallopian tube called cilia, which aids in the smooth passage of the mature egg to the uterus.
**Ovaries**
Women (females) are born with hundreds of undeveloped female egg cells or ova (one is called ovum). These eggs are stored in the ovaries. One egg matures, and is released every month, after puberty. If the egg is not fertilized by a male sperm, it dissolves and is discarded during menstruation.

**Uterus (Latin word for womb)**
This bag is like an inverted pear, held in place by ligaments and muscles. It has a very soft lining, which holds the fertilized egg and nurtures it until it becomes a fully developed baby.

**The Cervix**
The cervix is a ring of muscles located at the lower third portion of the uterus. It forms a barrier that holds the baby in place until it is ready to be born. During birth, the cervix expands and the baby passes through it.

**The Vagina**
This is elastic, muscular canal that connects the cervix to the outside of the woman’s body. It is this tube that receives the male organ during mating. During menstruation, it is the same tube through which the blood flows out.

**Now let us take a look at the male reproductive system.**
The male reproductive system includes the testes, prostate gland, sperm ducts, urethra and penis.

**Testes**
There are two testes (one is called a testis). These are held in place by the scrotum (scrotal sacks). The scrotum is a bag of tough skin. The job of the testes is to produce millions of male cells called sperms and also to make male reproductive hormones. This is a simple diagram of how a sperm cell looks under a microscope. During puberty, a boy’s hormones affect the way his body develops.

**Sperm duct**
During mating, thousands of sperm cells are released through the sperm ducts.

**Prostate gland**
The job of the prostate gland is to secrete prostate fluid. The mixture of sperm and prostate fluid is called semen.
The muscles of the prostate gland also help propel this seminal fluid through the urethra and into the female reproductive organ during ejaculation.

**The urethra**
This is the tube inside the male organ that carries urine or semen. It is the continuing part of the sperm duct.

**The Penis**
This is that ‘thing’ hanging in front of every male, which he urinates through. The size of the organ differs a lot for growing boys, because they develop differently. An erect penis of an adult man may be about 5.7 inches in length (average). Its function is to pass urine out of the man's body, and to pass semen into the female organ during mating.

**Mating explained**
Now that we know all about the female and male reproductive system, we shall learn how they work together to make reproduction possible.

Reproduction starts when the male organ enters the female organ. The general term for this act is 'mating'. It is also called Coitus or Copulation. During mating, the muscles of the male organ are filled with blood and it becomes erect. Erection can happen anytime, even when there is no mating activity.

The glands at the head of the male reproductive organ swells and the testes enlarge. Stimulation of the male organ causes an orgasm (the muscles of the male organ suddenly relax). At orgasm, the male sperm cells are released into the female. The proper term for this is 'ejaculation'. During mating, the brains prepare both the male and the female organs for this act. In women, the brain orders the walls of the female organ to enlarge, and gland to lubricate it. Lubrication of the female organ is important for the male organ to function correctly. It is important to note, that mating is all controlled by the brain, telling both male and female organ parts what to do and how to do it.

**What is Fertilization?**
Above we mentioned that sperm cells are released into the female organ. The cells then make their way through to the top of the vagina, and travel upwards toward the uterus. If there is an ovum (egg cell) released, the egg cell and the sperm cells meet.

Now hold your breath, because this is not fertilization yet!
When they meet, there are millions of sperm cells, and they will all meet the one egg. When the sperm cells meet the egg, only the sperm cell that is able to break through the egg membrane wins! Then, the egg nucleus meets the sperm nucleus, and fertilization occurs. A new life begins, and the female is now pregnant.

Sometimes, none of the sperm cells are strong enough to break through the egg membrane. If this happens, both male and female cells just dissolve and get washed away. Once one sperm has fertilized the egg, it is too late for the other sperm cells. No other sperm cells can enter in. Once a sperm fertilizes an egg cell, it becomes a zygote. The zygote (fertilized egg) at this stage possesses half the DNA (characteristics) of each of its two parents. The zygote then divides itself to form a very tiny ball called an embryo. The embryo continues downwards and finds itself a comfortable place in the uterus. There, the embryo attaches itself to the lining (walls) of the uterus and begins to grow.

**What about twins? How are twins made?**

Twins!! Well that’s even more exciting.

In fraternal (non-identical) twins, the mother released two different egg cells, one in each fallopian tube. In this case, two sperm cells would fertilize them and produce two zygotes. Because they are from two different eggs, they tend to have clear differences among them when they are born. The scientific name for this kind of twin is dizygotic.

In identical twins, there is only one egg cell from the mother and one sperm cell from the father. Hours after fertilization, the zygote splits into two new zygotes. This means they will grow into two very similar fetus and identical babies. The scientific name for this kind of twins is mono-zygotic. This kind does not happen often. In fact, identical twins make out only about 1/3 of all twins.

![Diagram of twins](image)

**There are two types of twins, identical and non-identical twins.**
Week 2 – Myself in a man’s body

Lesson: Becoming a man - what happens in my teenage body

Introduction
The period at which reproductive organs begin to develop is referred to as adolescence. The exact time the development begins varies from person to person. Some may reach adolescence earlier and others later. In boys, it usually starts a bit later than in girls, from the age of 12 and until around the age of 21 years. The development of the male reproductive organs begins when the body starts to produce sex hormones. Male sex hormones are called androgens. When a boy reaches the age of adolescence, the pituitary gland in the brain will start secreting androgen through the hormones. This androgen of the hormones, directed by the brain, travels through the blood cells and produces testosterone in the testicles.

During adolescence, testosterones are responsible for the development of the reproductive organs. It enables testicle growth and sperm production, (penis), and other reproductive organs to increase in size. Besides, it gives males the visible characteristics of manhood, like physical strength, a beard, perhaps chest hair and stronger muscles. Testosterone has an impact from puberty until the end of a man’s life. The development of the reproductive organs, although it starts during puberty, extends to the age of 21 years. As your sexual desire grows, you start to feel attracted to people of the opposite sex. As this happens you need to restrain from having unprotected sex, as you are now capable of making a girl of your age, or older, pregnant.

Apart from making a girl pregnant, you can also contract the HIV virus, and other sexual transmitted infections. Using a condom is the best way to avoid pregnancy as well as HIV/AIDS. Try as hard as possible to avoid sex until you are ready to get married, or use protection such as condoms.

Instruction

1) The Youth Club leader introduces the topic, or you can invite the teacher to assist. Together you read the “More knowledge” about the growth and development of the sex organs of a man.

2) In your Trio, use 10 minutes to come up with questions on the sex organs of a man.
3) Find the answers in the ‘More knowledge” or ask the teacher for help.
4) Question and Answer session.
   In the Trios, discuss and answer the following questions:
   a) What is masturbation? b) Does masturbation have side effects?

More knowledge
Puberty can be one of the most confusing and exciting times of a boy's life. During puberty, boys will notice their bodies develop and change, as they begin to look more like a man. During puberty, boys will grow taller, develop more body hair and odor, and their sexual organs will develop and have feelings that are more sexual. Puberty causes many physical and emotional changes for every boy's body. Though boys typically begin puberty between the ages of 9-14 years (commonly ends at the ages between 16-20 years) and the changes of puberty follow a pattern, every boy develops at his own pace. If you want to know if you have hit puberty, just follow these steps.

Details of the physical and emotional changes you experience during puberty.

1. **Body odor.** Your hormones affect your sweat glands, which can lead you to have a bit more body odor and for the odor to smell differently. If you have a change in your body odor, you may need to bath more often to keep your body feeling and smelling clean.

2. **Increase in the sizes of your testicles.** If the size of your testicles is increasing, then you have probably hit puberty. This is one of the first signs of puberty and it is not always easy to spot. Your testicles will continue to grow from childhood into puberty and to adulthood.

3. **Increase in the size of your penis and scrotum.** About a year after your testicles begin to increase in size, your penis and scrotum will start to grow as well. Your penis will increase in length, and will grow less significantly in width.

4. **Body hair growth.** Once your testicles have begun to grow, you may notice that you are growing body hair in places that previously had very thin hair, little hair, or no hair at all. These locations include your armpits, pubic region, arms, legs, chest, face, hands, and feet. Your hair will not only grow in new places, but it may become thicker and darker as well. Usually, you will grow facial and underarm hair about two years after you grow pubic hair.
   - Every boy’s body is different. Some boys develop thick body hair during puberty, while others do not see a major change in their amount of body hair. Some people are just naturally hairier than others are.
5. **Swelling in your chest.** Some boys develop a swelling in their chests for approximately 1-2 years. This is perfectly natural and does not mean you are developing breasts. It just means that your body is adjusting to its new form. This typically happens, when you are around 13-14 years old, but it does not affect everyone.

6. **Mild to moderate acne.** Acne (pimples) may be unpleasant, but it is a perfectly natural part of puberty. The high levels of hormones in your body can cause acne outbreaks in parts of your body that had previously never seen a single pimple. Part of the reason is also that your oil glands will be more active during puberty, which will cause you to sweat more and will make your skin more prone to acne. Most boys develop acne around the same time as they develop underarm hair.
   - As your skin grows oilier, you will find that you may need to bathe more often to continue to look and feel clean.
   - Some boys develop severe acne during puberty. If this is a concern for you, then you and your parents should see a doctor to discuss how to treat it.

7. **Having more erections.** A boy, or man, has an erection when his penis hardens and lengthens. This can happen when a boy has romantic or sexual thoughts, or when his penis is stimulated. Erections can also happen without any stimulation or romantic thoughts at all, which can be a bit embarrassing if you are in the public.
   - Though you can have erections before puberty, you will find that you get erections more often during puberty, as your sexual feelings and hormones develop.
   - Most erections are not completely straight -- they tend to curve upwards or to one side.

8. **Having wet dreams.** A wet dream happens when a boy becomes sexually aroused during his sleep and ejaculates semen. Semen is the sticky liquid that contains sperm. Sometimes, when you have a wet dream, you can remember having a sexual dream, but many times, you may just notice a wet patch on your pajamas, underwear, or sheets when you wake up.
   - If you experience a wet dream, then you should wash your penis and the soiled clothes, or linen.
   - Do not worry if you have never had a wet dream, but have experienced other signs of puberty - not everyone gets them.
9. **Growth spurt.** Every boy grows at a different time, and you may find that you are suddenly a head taller than all of your friends, or that you have not grown very much while all of your friends are suddenly hovering over you. But, don not worry - either your friends will catch up, or you will catch up with them. It may just take more time.

- Typically, boys will have their growth spurts a bit later than girls. You may come back to school after a long summer and find that all of the girls in your class are suddenly taller than you. That is perfectly normal.
- Look to see if your fingers are growing. And check to see if your feet are growing. For example, if you use to buy a certain size shoe and suddenly you shoot up 3 sizes in about 3 months, you are probably in a growth spurt.
- Most boys reach the peak of their growth spurts about half a year after they develop pubic hair. You will find yourself growing taller -- sometimes dramatically taller.
- Your shoulders may also become broader and more muscular to match your new frame.
- If you feel like you have already had a growth spurt but wish you were a bit taller, do not worry. Most boys do not reach their adult heights until their late teens or early 20s, so you will have time to grow.

10. **The shape of your face.** Before puberty, your face may be more rounded and apple-cheeked. During puberty, your face will become more oval-shaped and will look more defined and adult-like.

11. **The voice starts changing.** You may have found that your voice has been changing a lot lately, it will suddenly become a high-pitched sound (similar to a girls squeal), that can stop you dead in the middle of a sentence. This may be a bit embarrassing in public, but have no fear - most boys experience a breaking up of their voices, and it is just a sign that you are on your way to becoming a man. Your voice will stop changing after a few months and will become deeper pitched.

- Your voice is changing because of an increase in testosterone (the male hormone) in your body. This makes your vocal chords thicker and louder, which then allows them to produce a deeper sound.
- This change in hormones also makes your larynx grow bigger. You can see this change in a protrusion of cartilage in your throat, which is also known as the "Adam's apple."
- You may also find that you have more trouble controlling your voice, as the pitch of your voice goes up and down instead of sounding even.
12. **Starting to feel more attracted to other people.** If you have not shown much of an interest in girls or other boys before, but are suddenly interested in, or even fascinated by them, then you may be going through one of the emotional changes of puberty. If you're finding yourself feeling more attracted, or even aroused by girls or other boys, who were previously uninteresting to you, then this is a sign of your developing body.

- Every boy is different. You might have been interested in girls for years before you hit puberty, or you may be in the stages of puberty without feeling much interest in the opposite sex. This will come.
- If you're having strong sexual feelings of attraction and arousal directed toward other boys or men, you might be among the few percent of men who are homosexual, or it might only feel like that for a period of time, but you will see it change as you grow older.

13. **Having mood swings.** Were you previously pretty even-tempered, or would some people even have described you as being "chilled"? Well, all of that can go out the window when you hit puberty. Your raging hormones may make it more difficult for you to control your emotions and you can go from feeling completely happy, indifferent, or intensely angry, to having a completely different emotion just a few minutes later.

- If you find yourself suddenly feeling incredibly elated out of the blue, you may be experiencing a positive mood swing.
- If you were feeling fine and suddenly snap at someone, or even feel like you are extremely angry, then you may be experiencing a negative mood swing. Be careful not to hurt anybody, or be ready to say sorry if your anger was not intended.

14. **Feeling things more intensely.** Before now, you might have thought that everything was "fine," "okay," or, at most, "pretty cool." But now, every great experience you have, whether it is hanging out with friends, or eating good foods, may feel like the greatest thing that ever happened to you. On the other hand, any sad experience, however minor, may make you feel intensely upset or even "totally depressed."

- This new intensity of feeling is another sign that your body is adjusting to new levels of hormones.

15. **Experiencing more anxiety.** Anxiety is that jittery feeling that can bubble up in your chest, stomach, hands, and almost any part of your body when you are nervous or worried about something. You may find yourself feeling anxious about things that did not matter to you so much before, whether it is hanging out with friends, or eating good foods, may feel like the greatest thing that ever happened to you. On the other hand, any sad experience, however minor, may make you feel intensely upset or even "totally depressed."

- Anxiety can feel uncomfortable, but it is just a sign that you really care about something. Everything may take on a new and more intense meaning when you are going through puberty.

16. **Feeling more withdrawn from your parents.** While you might have loved being at home or going to visit some family members, you may now feel yourself withdrawing from your home environment. During puberty, you may want to have more control over your life and actions, because you are feeling like you have less control over your body. It is only natural that you would want to spend less time at home with your parents, who are most likely a controlling force in your life. Here are some signs that you may be withdrawing from your parents:

- You might feel you have the urge to be alone, even go to a spot where you can be in solitude, whereas before you loved to be in the company of your parents.
You generally feel a need for more privacy, when you did not care before if your parents or siblings were nearby.

- You are spending much more time hanging out with your friends or just out of the house.
- You spend more time talking to your friends than you spend talking to your parents.
- You feel like you have less and less to say to your parents, and are not eager to tell them about your day.

17. Caring more about your appearance. If you never used to care much about your looks, but are now thinking more and more about your hair, your clothes, and the appearance of your hair and body, then you are growing more self-conscious and becoming more aware of how you may be viewed by the opposite sex. This is perfectly natural and is a sign of your developing mind.

It is important to acknowledge, that it is you who are changing, and not all the others who want to hurt you.

*The changes from boy to man*
18. Safe sex practices. Because you are starting to feel sexual feelings, puberty is a good time to educate yourself about ensuring sexual safety. This does not mean that you should start having sexual intercourse with anybody at all, but it does mean that when you are ready to have sex, you are prepared for it.

- The right to say no is something that should be taught in schools, but it is not always so. If you say NO, then nobody has a right to force you. Unless you give a clear signal that you agree, they should not try to have sex with you. If someone force you to have sex without your consent, that can be considered sexual assault or rape. You should also never pressurize anyone into having sex with you, and never force them, if they are not interested. Unless both parties agree and are ready, you should not be having sex. Make sure that you are being honest about your sexual habits. If you have to lie to friends and family about being sexually active, it is probably best to wait until you are able to be honest. It is also best to be honest about your feelings (or lack thereof) for someone, so that no one (including you) feels like they have been fooled.

Remember, that causing a girl to fell pregnant will have consequences for her the rest of her life.

Make sure that you are in control of protection. It is a good idea to use condoms when you are having sex in order to avoid HIV/AIDS and sexually transmitted diseases and infections.
Week 3 – Myself in a woman’s body

Lesson: Becoming a woman – what happens in my teenage body

Introduction

A girl shows very rapid body growth as soon as she reaches her teens. Girls reach this stage of rapid growth relatively earlier than boys. This growth, which begins in the teens, continues until the age of 18 years, which marks the beginning of adulthood. Physically your body starts to change; you can feel uncomfortable about it, and often become overly sensitive about your physical appearance.

The first change is usually the start of breast development, this usually occurs around age 8 to 13 years. Shortly afterwards, pubic and underarm hair begins to grow. You start the journey of becoming a woman with the beginning of your first period. At that point, you are no longer a little girl. The interval from breast budding to the first menstrual period (menarche) is usually about 2 to 3 years. On average, the first period occurs at about the age of 13 years, but there is a wide range of varieties (typically between ages 10 and 16 years), depending on many factors.

Menstrual cycles are usually irregular in the first year, and can take up to 5 years to become regular. In addition, body shape changes, and the percentage of body fat increases, and accumulates on the hips and thighs. At this stage, girls also develop sexual maturity. Sexual maturity is the stage of life when you can have children.

One aspect of sexual maturity is the curiosity about sex, and about the bodies of the people that can be an attraction. With the onset of puberty, it is normal to be sexually attracted to boys that you would want to be more than 'just friends' with.

You may also feel sexually excited by normal everyday activities, such as reading a romantic novel, watching a romantic scene on television, or having sexual fantasies. These feelings are normal and there should be no guilt involved. You may have many questions about sex. It is a good idea to talk to a mature adult (like your mother, a nurse or doctor, a teacher you trust or a good friend) with whom you are comfortable discussing sex. You should get your questions answered, and should stay informed on the benefits of safe sex.
Instruction

1) The Youth Club leader explains the growth and development of the sex organs of a woman. Invite the teacher, if you want help.

2) In your Trios, use 5-10 minutes to come up with questions on the sex organs of a woman and answer them in forum, in the club.

3) Question and Answer session:
   In the Trios, discuss and answer the following questions:
   a) When should I start to have sex?
   b) What can I do to avoid falling pregnant before I want to have children?
   c) What is an abortion?
   d) Is it safe to have an abortion?

More Knowledge

Puberty is an exciting time, but for some it can also be a terrifying time! Suddenly you find that your breasts are growing, you are getting hair in different places, and your mood starts swinging all over the place. Not to worry, all of these things are perfectly normal. Once you know what to expect, you can enjoy going through puberty. Below find more details of the physical and emotional changes you experience during puberty.

1. General growth. When you start puberty, you will begin to gain weight and height. Often your limbs grow first, so that you feel awkward and clumsy (do not worry, this will not last forever).
   - Most girls gain weight during puberty. You might notice more fat along the upper arms, thighs, and upper back. Typically, your hips will get rounder and wider, while your waist gets narrower. Of course, this develops differently in different girls. Some girls will be bigger than others. Some girls will be shorter than others.
• Girls tend to grow fastest around six months before their first period. This is why girls tend to be bigger than boys during puberty.
• You'll also find that hair will start growing in your armpits, and that the hair on your legs gets coarser and more abundant.

2. Breast development. Having your breasts develop is an obvious sign that you are going through puberty. It is important to remember, however, that some girls develop early, some develop late, and some are flat-chest throughout their entire lives. It all depends on your genetics.
• Typically, you'll have small, firm, tender lumps (called buds) under one or both nipples, when your breasts first start to grow. Over the next two years or so, you'll find that your breasts will get larger, and become less firm in texture.

![Image of breast development]

3. Genital development. Going through puberty, means that your sexual organs grow and change. This can be a little unnerving, if you do not know what to expect. However, it is nothing to be alarmed about!
• Your clitoris will grow larger. The clitoris is typically a sensitive, pea-sized nodule of tissue above the entrance to your vagina.
• Hair will grow between your legs in your pubic area; this hair will be coarser and curlier than the hair on your head. This is called pubic hair.

4. Period. Your period is one of the biggest signs that you have hit puberty. It can be unnerving in the beginning, because you are not used to it.
• Typically your period will show up between the ages of 10 and 16 years.
• It can take a while before your period becomes regular, as your body adjusts to this new aspect of life.
• Some symptoms of your period include: aching in your upper thighs, back pain, bloating, nausea, diarrhea, fatigue, sore breasts. You also might notice some excretions in your underwear before your period starts (usually whitish or clear). You can take any over-the-counter pain medication for the cramping and pain.

Your period will occur once a month during the fertile period. During these 3-5 days, blood leaves the uterus through the vagina, and passes out of the body. It is a healthy process and it is part of how the body prepares for pregnancy.
For most women, the period is a normal part of their lives. But often they do not know why it happens or why it sometimes changes.

On the drawing below, you can see how the egg grows in the uterus. At the same time, blood is collecting in the wall of the uterus. If the egg is fertilized, it will cling to the wall of the uterus and the blood will be used for the fetus to grow. If the egg is not fertilized, it will be ejected together with the blood that was not used. This is what causes the monthly bleeding.

Then a new egg is released, and the process begins again. This will continue until you are 45-50 years old. This is called menopause. After menopause, a woman is not able to fall pregnant again.

![Diagram of the menstrual cycle]

**Cycle of menstruation**

- Problems with menstruation. If you have problems with your period, try to talk to other women, sisters or friends. You may find that they also have the same problem and can help you.

- Changes in bleeding. Sometimes the ovaries do not release an egg. When this happens, your body produces less progesterone (a hormone), and this might cause changes to the frequency and amount of bleeding. Girls who have recently begun to menstruate - or women who stopped breastfeeding recently - may bleed only once every two months, may have only a little blood or may have more than usual. Older women, who have not yet entered menopause may have more blood flow and more frequently, than when they were younger. As they approach menopause, they may stop menstruating for a few months and then start again for some time.

- There are different products you can use to manage your bleeding. You can decide to use tampons or sanitary pads. You may need to use a pad especially at night when the menstrual flow can be heavier. You can produce your own sanitary pads. You can also try using a menstrual cup; these cost less in the long run and they are reusable (unlike tampons and pads). Get help from your mother or older sisters, or your teacher, to find the best way to manage.

If you happen to have your period at school, you do not need to worry. Usually, before your period, there will be signs that your period is coming. Before that day arrives, pack a bag with pads, and an extra pair of underwear, and you will be ready to face the event.

5. **Acne.** When puberty starts occurring, your body gets more sensitive to the hormone testosterone (girls have it as well as boys!). This hormone makes the glands in your skin produce too much oil. With dead skin blocking the little tubes where your hair grows through, the oil builds up to develop small pimples.
• Sometimes bacteria can infect a blocked hair follicle, because the hormones change the levels of acid in your skin. This infection can create a spot or pustule.
• Make sure that you keep your skin clean to prevent the build-up of oil. Wash twice a day. Avoid scrubbing hard at your face, because this will irritate your skin. Use some cream or oil, if your skin is dry.
• If you are having really bad acne, it is good to get some cream or lotion that is designed to prevent or treat acne. You can get some over-the-counter at any drugstore or pharmacy. You can also see a doctor to get help.

![Image of skin care process](image)

6. **Body odor.** When you start puberty, your body begins to develop large sweat glands in your armpits, your breasts, and your genitals. These glands (called apocrine glands) release sweat when you are stressed, when you are highly emotional, or when you are sexually excited.
• It's the apocrine glands that create body odor, so you'll need to keep those areas (armpits, breasts, genitals) clean, by washing with soap. This keeps bacteria from building up.
• Change and wash your clothes regularly, especially the clothes that come into contact with the apocrine glands. These would be things like bra, shirts, and underwear.
• Using an antiperspirant or deodorant each day can help mask, or cut down on body odor. Antiperspirants reduce the amount of sweat your body produces. Deodorants use perfume to mask your body odor.
• Shaving your armpits can also cut down on body odor. Armpit hair traps sweat and odor, which causes bacteria to multiply and create more body odor.

7. **Interest in the opposite sex.** Because puberty is the time when you're maturing physically, emotionally and sexually, you might find yourself noticing other peers in new and exciting ways. This is perfectly normal.
• This is a time when you will start exploring your sexuality and your sexual feelings about other people. You could at times feel that you are interested in the same sex (homosexual or lesbian) or both boys and girls (bisexual), or that you are not interested in sex at all (asexual). In your teens you should not worry too much about it. This could change as you get older, or it could stay the same. Remember, that each person experience things differently, and you have a right to be just as you are.
• There are lots of taboos associated with masturbation (touching your genitals), but there is nothing biologically wrong with masturbating. It's natural to feel curious about your sexual organs, and about other people's sexual organs, so masturbation is one way to learn to be comfortable with your body and your sexuality.
• It's good to keep in mind that you do not need to act on every sexual feeling that you have. If you do act on your feelings, make sure that you understand the concept of consent and protection.

8. **Hormones.** Hormones are the things that are making all the changes in your bodily and mental growth. Hormones also cause mood swings and emotional turbulence that accompanies puberty.
   - Your hormones go to your ovaries (which are the two oval-shape organs to the right and left of your uterus). They trigger the growth and release the eggs in your ovaries. The production of this hormone is called estrogen.
   - Estrogen matures your body and helps to prepare you for pregnancy (whether you decide to have children or not).

9. **Mood swings are normal.** Starting puberty (and the years thereafter) can be difficult, because of the hormones that are changing your body and your mind. This can lead to mood swings, low self-esteem and anxiety. This is all perfectly normal.
   - Some of the mood swings you might experience are low self-esteem, aggression (feeling angry, often for no reason), depression, feeling happy one moment, and angry or upset the next. The best thing you can do is to acknowledge how you are feeling and find a quiet place to calm yourself down, especially if you are feeling angry.
   - PMS (premenstrual syndrome) which occurs every month is often a big cause of your fluctuating moods. This is because of the surge of hormones. You might have difficulty sleeping, feelings of irritability, anxiety, and cravings for certain foods (often sugar). Keeping track of your menstrual cycles can allow you to feel a little saner during PMS, because you will know that it is just your hormones that are causing you to feel this way.
   - On rare occasions, puberty can trigger real problems with your mood or your mental processes. If your mood seems out of control, or your depression, or anxiety has taken over most part of your life, you may need to seek help. Just be reassured that there is nothing wrong with needing counseling. There are many people who need help to cope with mental disorders in order to feel well again, and most mental and depressive issues are caused by hormones, or lack of them, anyway.

10. **Your feelings towards your parents.** One thing you might find is that you are having problems with your parents. This is because through your teenage years you are looking for independence and trying to identify who you really are, as you are no longer a small child needing the approval and guidance of your parents for every step of the way.
    - It's good to talk things through with your parents when you feel like they are stifling you. Ask them to try and understand how you feel, as there was a time when they experienced the same feelings. For example, as you are now older, you might talk with your parents about extending being allowed to do more things on your own. If you can present your case by showing them you will not abuse the changes that you are asking for, you might find your parents dealing with your search for independence more easily.
    - Ask yourself why your parents are acting in certain ways that might be irritating to you. Have you recently betrayed their trust by doing something you were not supposed to do? (staying out late at a party, or not doing your homework, for example)? Have you been hanging out with people who have been encouraging inappropriate or unhealthy behavior? Your parents are probably just trying to do everything they can to protect you, also from falling pregnant by mistake.
11. **If puberty comes too early, or too late.** DO NOT PANIC if it does not exactly follow the way you think it should. Sometimes, a woman’s breasts do not develop fully until way after their period has appeared, sometimes they never do. It is all okay. If you do think there is a problem, make sure that you talk to an adult or a doctor about it.

- Sometimes puberty comes at a really young age. This can be difficult, as suddenly you are taller than everyone else, or you have breasts, and you have already started your period.
- On the other hand, it can also happen that you will start puberty later than everyone else. This can be difficult, because you feel like you are being left behind, or that no one will find you attractive! Do not worry about that. Just know that puberty will eventually happen.

12. **Safe sex practices.** Because you are starting to feel sexual feelings, puberty is a good time to educate yourself about ensuring sexual safety. This does not mean that you should start having sexual intercourse with anybody at all, but it does mean that when you are ready to have sex, you are prepared for it.

- The right to say no is something that should be taught in schools, but it is not always so. If you say NO, then nobody has a right to force you. Unless you give a clear signal that you agree, they should not try to have sex with you. If someone force you to have sex without your consent, that can be considered sexual assault or rape. You should also never pressurize anyone into having sex with you, and never force them, if they are not interested. Unless both parties agree and are ready, you should not be having sex. Make sure that you are being honest about your sexual habits. If you have to lie to friends and family about being sexually active, it is probably best to wait until you are able to be honest. It is also best to be honest about your feelings (or lack thereof) for someone, so that no one (including you) feels like they have been fooled. If someone cannot understand a hint, that is their problem, not yours.

Make sure that you know about the different forms of birth control (like pills, IUDS, the morning after pills, condoms etc). It is a good idea to use condoms when you, are having sex regardless of whether you are on birth control pills or not, in order to avoid HIV/AIDS and sexually transmitted diseases and infections.
Week 4 - Sharing with our peers

Action: Making a presentation about the transformation from teenager to adult

Introduction
In this action, you are going to make a picture presentation on what you have learned during this month about reproductive health, and the changes taking place in your body when you change from a teenager to an adult.

Most teenagers know about sex from peers or adults, but they might not know all the explanations you have now studied, and they might not know how to take proper care of themselves. By telling them, what you know, can help them to make better choices.

Instruction
1) Each of you makes a presentation of what you have learned about reproductive health. You can make it as a strip or as a series of pages with each their own subject.
2) Each of you explains your presentation to another Youth Club member, to check that you have remembered the most important things and that you are able to explain about your pictures.
3) Use your presentation to share your knowledge with your friends in school or friends that have already left school.
4) Each agrees to show the presentations to 10 friends. You can also choose to do it in pairs.
5) Next time you meet in the club, share your experiences and conclude on the action. Was it worth it? Did your friends listen? Did they get new knowledge?
Week 1 – HIV and AIDS – how to prevent it

Course: We take control of HIV and AIDS in our lives, and in our community

Introduction
You need to know about HIV and AIDS.
To understand what it is!
To know how to protect yourself against HIV.
To make a conscious decision that you will protect yourself against it.
To decide how you will do it.

HIV and AIDS is a 100 % preventable disease.
When all people understand how their actions are a part of spreading, or not spreading AIDS, they can take control of their own lives. When all people take part in changing the conditions that causes the epidemic to spread, they can take part in controlling the spread of the epidemic in their community.

Why is AIDS so serious?
It has no cure.
There is no vaccine yet.
It causes death.
It leaves orphans.
It increases poverty.
Worldwide about 33.6 million people are infected, and the number is growing.

Instruction
1) Lean from the teacher’s course:
   What are HIV and AIDS?
   How you can get it.
   Why testing is important.
   What treatment is possible for HIV and AIDS?
2) Make two groups. Each group organizes a role-play to show to the Youth Club: One group organizes a role-play on convincing a youth to be tested. The other group organizes a role-play on introducing healthy living to a family with a HIV positive youth.
3) Show the two role-plays in the Youth Club and to the community, during one of your community actions.
**More knowledge**

**The spread of HIV and AIDS in Sub-Saharan Africa**

Since the beginning of the epidemic, almost 78 million people have been infected with the HIV virus, and about 39 million people have died of HIV globally.

HIV and AIDS have affected Sub-Saharan Africa more heavily than any other region in the world. In countries in Sub-Saharan Africa there are now 23.5 million people living with HIV.

1.2 million people become infected every year.

1.8 million people die every year.

These figures are from the UNAIDS report for 2013.

**What is HIV/AIDS?**

HIV is the virus that causes AIDS.

HIV causes AIDS by damaging the immune system in your body

H - stands for Human. The virus only infects humans, not animals.

I - stands for Immune-deficiency. The virus attacks the immune system.

V - stands for Virus. It is a virus - a small living organism - that causes disease.

The HIV virus enters a human cell where it starts to replicate (copy) itself, again and again.

The HIV virus cannot enter all our body cells - they can only enter the CD4 cells. CD4 cells are the commander cells of the immune system.

When you get infected with the HIV virus, it starts replicating very fast during the first two weeks. This happens because the immune system has no immediate defense against it - it takes some time to build up this defense.

After 2 - 3 weeks, the immune system has been able to build up its defenses, and the number of viruses will stabilize to a lower level.

There are, unfortunately, many things that can rock this balance. Re-infection, (getting infected again) with a new set of viruses will give HIV stronger power to fight the immune system. Becoming sick with flu, malaria, or other diseases will force the immune system to deal with them, as well as having to fight against the HIV, therefore the HIV viruses will be able to increase in numbers.

- A perfectly healthy looking person can still be infected with HIV.
- A person is more infectious just after being infected.
- A person is more infectious just after being re-infected.
- An HIV positive person should avoid re-infection.
- An HIV positive person should avoid becoming sick from any other diseases.

When the HIV viruses increase vastly in numbers, they kill the CD4 cells faster than the body can produce new ones, and the immune system will gradually become weaker and weaker.

When the immune system is weak, the body can no longer protect itself against illnesses.

When this happens, we say that a person has AIDS.

It can, however, take from 2 years to over 10 years, from the time of the infection before a person develops AIDS.
When a person gets ARV treatment, the drug supports the body’s suppression of the HIV virus, and its ability to replicate.

**What do the letters in AIDS stand for?**

- **A** - stands for **A**cquired. That you get it from someone.
- **I** - stands for **I**mmune. That is your body’s defense against diseases.
- **D** - stands for **D**eficiency. That your immune system is not strong enough to protect you.
- **S** - stands for **S**yndrome. This means a group of diseases or infections that act together.

It means that a person with AIDS has many infections working together, and that these infections have come because the immune system has been weakened by a virus the person has got from someone else.

**How HIV infects you and how you can prevent it**

HIV can only live in human bodily fluids such as blood, semen and vaginal fluids. Infection can only take place when these bodily fluids from an infected person come into contact with another person.

Like many other viruses, HIV does not infect through air and water. HIV can only infect through sexual contact, from mother to child during pregnancy, delivery or breastfeeding, blood transfusion, the use of contaminated needles and, in rare cases, open wounds and sharing razor blades.

- Most people get infected with HIV during sexual intercourse.
- You can be infected through vaginal sex, anal sex or oral sex.
- You do not automatically get infected, when you have sexual intercourse with a person infected with HIV, but the odds are very high that you will.
- The chances of getting infected increases when you or your partner has an STI - a Sexually Transmitted Infection - because sores on your sexual organs make it easier for the HIV virus to enter your body.
- The risk is also increased when you practice “dry sex”, or other sexual practices that cause small sores on your sexual organs during intercourse.
- There are many examples, where people have become infected after having sexual intercourse just once, with a person infected with HIV.

The risk of having sexual intercourse with an HIV positive person without protection is never worth it.

**How HIV is not transmitted**

HIV is not spread through ordinary human contact like:

- Hugging, kissing, shaking hands
- Sharing cups, plates, spoons, bed linen or clothes
- Sharing latrines or toilets
- Living with or sleeping in the same room
- Playing together
- Sneezing and coughing
- Mosquito bites
- Caring for somebody who has developed AIDS
ARV is the treatment of an HIV infected person
Anti-retro-viral drugs (ARVs) are drugs that significantly delay the progression of HIV to AIDS, and thereby allow people living with HIV to live relatively normal, healthy lives. ARV hugely reduces death rates and suffering. ARV is the most effective treatment of HIV infected persons. Therefore, there are many good reasons to go to the nearest clinic to be tested if there is a chance that you can be infected with HIV. Most clinics all over the world can help you to get access to ARV drugs.

GO FOR TESTING!!
Week 2 – Testing your knowledge on HIV and AIDS

Lesson: Knowledge on HIV and AIDS gives you the power to take informed decisions

Introduction
HIV and AIDS was a new disease in the 1970-ties. When the first people became infected, the doctors did not know the disease and did not know what to do about it. Often people with HIV and AIDS died from attracting other diseases, which were then listed as the cause of death. Today doctors as well as the general community know that people who have the symptoms of HIV and AIDS need to be tested, and if they test positive, this is not the same as a death sentence. They need to start on Anti Retroviral Therapy, and in this way, they can live a normal life for many years.

Another serious effect for the first people diagnosed with HIV was the fear by their friends, and even by their family members, to come near them. Many patients suffered to die alone as outcasts, with nobody to help them to get food or stay clean. The same happened for children who had attracted the virus from their parents.

Today we have the knowledge of how HIV and AIDS spreads and this gives us the possibility to avoid attracting the disease, and to treat people infected with dignity and love.
Even then, many people living with HIV, and children orphaned by HIV and AIDS are still mistreated. This needs to stop.

Instruction
1. The Youth Club leader reads the introduction.
2. Together you go through the “More knowledge” material, following the instruction on how to run the discussions.
3. The Youth Club leader introduces the points under ‘More useful knowledge”.
4. Finally, discuss how people in your village or community are dealing with HIV and AIDS. Are they well informed on how HIV and AIDS are spread? Are people living with AIDS well taken care of? What kinds of actions are needed from the Youth Club to improve the situation? Who needs help?
More knowledge

Test yourself
Divide in groups of three, and ask the groups to discuss the following statements.
Read the first statement; give a few minutes for the groups to discuss if it is true or false,
hear the answers from one or two groups, and explain the facts. Take help from lesson 1 to
find the answers. Give time for questions.
(The idea is, to first consider what is correct, and then get the answer. It is not meant to
be a quiz with points).

- HIV is caused by AIDS. (False. AIDS is caused by HIV).
  HIV is the virus that causes AIDS.
  The HIV virus damages the body’s immune system, which is its defense against other
diseases. When the HIV viruses increase vastly in numbers, they kill the CD4 cells of the
immune system faster than the body can produce new ones, and the immune system will
gradually become weaker and weaker. When the immune system is weak, the body can no
longer protect itself against illnesses. When this happens, we say that a person has AIDS.

- AIDS damages the body’s defense system. (True).

- There is a cure for AIDS. (False).
  Anti-retro-viral drugs (ARV) cannot cure AIDS. The drugs can significantly delay the
  progression of HIV to AIDS, and thereby allow people living with HIV to live relatively
  normal, healthy lives for many years.

- Most people are infected with HIV during sexual intercourse with an infected person. (True).
  Give three examples of how HIV is transmitted, other than via sexual intercourse.

- You are not automatically becoming infected, if you have sexual intercourse with a person
  infected with HIV, but the odds are very high that you will. (True).

- A person cannot get AIDS from donating blood. (True – if new needles are use).
  Give five examples of how HIV is not transmitted.

- People with AIDS often die from various other serious illnesses. (True).

- A person can have HIV and not know it. (True).

- The only way to know if you have HIV is by getting a blood test. (True).
  Discuss the process of being tested for HIV infection.
  Discuss why it is important to be tested.
  Discuss what ARV is.
  Discuss why a person might be reluctant to be tested for HIV.

- The personnel who do the blood tests are not allowed to tell the results to anybody else
  than the person who were tested. (True).

- There is no way you can protect yourself from AIDS. (False).

- If you are strong and healthy, you cannot get HIV or AIDS. (False, but somebody who is
  strong and healthy will probably live longer before dying from the disease).

- A perfectly healthy looking person can still be infected with HIV, and can still infect others.
  (True).
  Give four examples of how to prevent to spread HIV infection.
• A person is more infectious just after being infected. (True).
• A HIV positive person cannot be re-infected. (False).
• A HIV positive person is more infectious just after being re-infected. (True).
• The odds of getting infected increases when you or your partner has an STI (a Sexually Transmitted Infection). (True).
• If you use condoms when having sex, the chance to contract HIV and AIDS is smaller. (True).
• A person with AIDS is pale and thin. (False).

The only way to know if you or someone else is infected with HIV is to be tested.
It is simply not possible to see if a person is infected with HIV.
You cannot feel that you have HIV. You can only have clues if you quickly get weak or often get sick because of a weak body defense.
However, a person can get weak or sick for other reasons.
A test will show your HIV status as it was 3 month ago. To be 100% sure, you do not have HIV, you need to go for a confirmation test after 3 months. Make sure not to put yourself at risk between the two tests.

More useful knowledge

Why is it important to be tested?
1. You need to be sure that you do not infect others.
2. If you know you have HIV, you can start on treatment and adopt a healthy way of living to prolong your life.
3. If you are HIV positive, you might chose not to have children.

How is it possible to live positively with HIV and AIDS?
It is important that a person with HIV and AIDS does not give up, but accept the situation and decides to live positively. To live positively means:
1. Accept the fact that HIV is with you, and make the best of your life with HIV and AIDS.
2. Live as normal as possible. Make choices in life that promote a good health: Eat good food, do not smoke and drink alcohol, do physical exercises and get enough rest.
3. Do not infect others and do not get re-infected (stick to one partner and always use a condom)
4. Keep good hygiene.
5. Drink 2 liter of clean water every day.

What is good food for a person infected with HIV?
The food should be rich in proteins, which you can get from soybeans, cowpeas, kapenta, eggs, milk and meat. It should be low in fat - so just use a little cooking oil. It should contain many vitamins and minerals, which you will get through fruits, green leaves and all other vegetables. Soybeans also contain many minerals. Do not overcook the vegetables - because then you will destroy the vitamins.

People suffering from AIDS often lose appetite. It is important to find the type of food they can eat, such as fruits, soup, porridge or similar.
Eat a variety of immune boosting remedies and health promoting food such as herbal tea, garlic, ginger, mint, lemon grass, moringa etc. Families will benefit from growing herbs in their garden.
Eating multivitamin tablets often makes the side effects of the ART more bearable.
How does ART - Anti Retroviral Therapy work?
People who have a CD4 count under 200 or symptoms of full-blown AIDS need to start on anti retroviral therapy (ART). This is available in tablets that the patient must continue to take every day for the rest of his / her life. Pregnant women diagnosed with HIV need to get on treatment immediately, regardless of what the CD4 count shows, to prevent the child from being infected during birth.
It is very important to take the medicine timely and to adhere to the drugs even if there might be side effects in the beginning, which could tempt to discontinue the treatment.

How to take good care of people with HIV or AIDS?
Persons with AIDS need love, care and encouragement from family and friends. You must:
1. Never condemn a person for being HIV positive or having AIDS.
2. Be a good listener and accept that they are HIV positive. Remember that people will feel weak, angry, frightened, lonely and depressed.
3. Help the person to get medical treatment when sick, encourage plenty of rest and ensure good food.
4. Keep the person active and busy.
5. Help with cooking, cleaning and looking after children.

Who needs to know?
A person infected must always inform his/her partner about the disease, in order for the partner to be treated too. If not informed, the partner will not be treated, and the disease will become very serious.

Stigma and misconceptions often keeps people from sharing that they are infected by HIV and makes it difficult for friends to help. It is important to share knowledge on how the disease spreads, so that people know how to deal with it and do not need to be afraid of being infected.
Month 5
Taking control of HIV and AIDS

Week 3 – My own decision to stay free of HIV
Lesson: It takes a serious and personal decision to stay free of HIV – how to go about it?

Introduction
In the previous lessons, you have been informed about HIV and AIDS. Now it is time to make a conscious decision to protect yourself against it. You can take many decisions, and when you keep them for yourself, it is easy to change them when obstacles come up.

It demands much more courage to share a decision with your peers. Then it becomes serious business. You might even need to make a more detailed plan for how you can carry out your decision. You might need to repeat all the good reasons for why you decided on the decision in the first place.

One way to take a serious decision could be to make it together with a group of good friends who have the same interest. You could start with a discussion on what it is you want to obtain. What are the obstacles that might make you change your mind? How to overcome them?

Often a group of people who were interested to stop smoking cigarettes has joined hands to carry out their decision.

Instruction
1. The Youth Club leader introduces the lesson.
2. Work in your trios and discuss your actual situations. Some of you might already be married, while others are just of an age where you might be about to date your first girl-/or boyfriend.
3. If you want, you can share your considerations in the club.
4. The Youth Club leader reads the “More knowledge” aloud, and the Trios meet again for each to make a personal decision on how to avoid infection with HIV.
More knowledge
You have learned that HIV and Aids is a 100% preventable disease. When all people understand how their actions are part of spreading, or not spreading AIDS, they can take control of their own lives. When all people take part in changing the conditions that causes the epidemic to spread, they can take part in controlling the spread of the epidemic in their community.

So, if you are not yet infected by HIV, you can avoid HIV infection by the decision to ensure that you are not infected. In practice, you can do that in one or several of the following ways:

– You can abstain from sexual relations.
– You can stick to one faithful partner, where both of you have taken an HIV test together, and know each other’s HIV status.
– You can use a condom correctly every time you have sexual intercourse.
– You can use gloves when you treat open wounds.
– You can take care never to share a razor or syringe with anyone else.

You need to know if you are HIV positive or not, so go for an HIV test at your nearest clinic.

If you are HIV positive, you can get treatment Anti Retroviral drugs (ARV) under Anti Retroviral Therapy ART).

If you are infected, you need to decide about:
Informing your partner.
Take precautions not to spread HIV to other people by using the relevant methods above.
Ensure that HIV is not transferred to your children during childbirth.
Living a positive life.
Month 5
Taking control of HIV and AIDS

Week 4 – Fighting stigma and misconceptions

Action: Community action on sharing knowledge on HIV and AIDS

Introduction
In this action, you are going to use your knowledge on HIV and AIDS to improve the situation in your village or your community in this regard. It is important that you choose to make an action that is close to your heart. In this way, you can move people to listen, discuss and even change their way of thinking.

Here are some ideas on how to make actions:
You could make a drama that can be shared with people at different events where many people are gathered.
You could decide to work together in your Trio and meet with other youth in smaller groups.
You could give lessons for the older classes in school with many different ways to explain about HIV: Dramas, songs, talk shows, a quiz and discussions.
You could make a series of posters to be placed at the nearest clinic or at the schools.
You could make an action together with the clinic to establish condom outlets in the village with different vendors, and decide on how to inform the public.
You could make an event for youth from the church.
You could decide to concentrate on informing the women in the village.
You could make a campaign for all people to be tested and organize testing at a central place that is easy for people to reach.

Instruction
Planning the action.

1) Start with a discussion on what issues it would be most important for the village or the community to know more about or take a stand to. This could be anything from general information of youth, to lack of availability of condoms, or discrimination in the school against orphan children or children with HIV.
2) Decide on the topic of your action.
3) Decide on the methods to use to reach people with what you want to tell.
4) Make a plan for producing the material or the plays you need.
5) Try out your action with a smaller group of people and find out if anything should be improved.
6) Make agreements with the people or places where you want to carry out your action.
7) Get going!
Week 1 – The food pyramid

Course: Eating from all food groups

Introduction
Eating well is vital for a healthy and active life. We know that we need to eat, in order to have strength to work. However, we do not always know what to eat to get the right amounts of energy and nutrients. If we do not eat all the nutrients, we need, and if we do not eat the correct amount of each of them, we often become sick and even malnourished. So let us find out how to eat correctly, even if we only have limited resources.

Diets and eating habits vary from place to place. Families in different areas eat different types of foods, cook in a variety of ways, and the type and amount of food available can differ considerably.
But, it goes for everyone, no matter where you are living, that the human body requires a healthy, balanced diet, which provides the correct amount of food for energy and growth. The diet must consist of a variety of different foods from different food groups, so that it contains all the many macronutrients and micronutrients, a person needs. This is especially important for children and youth who are still growing, and for pregnant women.

In this course, you will learn more about what to eat to stay healthy, and you will be presented with the food pyramid and its different food groups, how to get the nutrients you need, how to know what enough healthy food means, and how to cook healthy meals, by using the locally available products.

Let us get started by introducing the food pyramid.

Instruction

1) The teacher presents the different food groups by making a drawing of the food pyramid on the blackboard, and explains what the body needs.

2) In the Trios, list the different kinds of foods you eat in your family on a normal, average day.

3) In forum, a couple of the Trios place their foods in the food pyramid. In this way, you get a good picture of the amount, and the variety of food that the families, in general, eat during a day.
4) The Club discusses what is missing, what the problems are, and what the consequences are.

5) The Club comes up with ideas on how you can find foods from all the food groups among the local foods. If you do not get enough fruits and vegetables, maybe you can add some wild plants, or plan to grow your own vegetables.

**More knowledge**

<table>
<thead>
<tr>
<th>Nutrients</th>
<th>Main use in the body</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Carbohydrates</strong></td>
<td>Carbohydrates provide the energy needed to keep the body breathing and alive, to move and keep warm, and to growth and repair of tissues. Some starch and sugar changes to body fat when eaten. Fibers makes feces soft and bulky and absorb harmful chemicals. In this way, they help to keep the gut healthy. Fibers also slow down digestion and absorption of nutrients in meals, so we get the most out of the food, and they help to prevent obesity.</td>
</tr>
<tr>
<td>Starches and sugars</td>
<td></td>
</tr>
<tr>
<td>Dietary fiber</td>
<td></td>
</tr>
<tr>
<td><strong>Fats</strong></td>
<td>Fats provide a concentrated source of energy, and the fatty acids needed for growth and health. Fats help the absorption of some vitamins such as vitamin A.</td>
</tr>
<tr>
<td><strong>Proteins</strong></td>
<td>Proteins build cells, body fluids, antibodies and other parts of the immune system. Sometimes proteins are used for energy.</td>
</tr>
</tbody>
</table>

Besides all the nutrients that you body needs, you need to drink a minimum of 2 liters of WATER every day. All the functions of your body needs water.

The body also needs micronutrients such as Iron, Iodine, Zinc, Vitamin A, the Vitamin B-groups, foliate and Vitamin C. You get the micronutrients from eating a variety of foods.

You will learn more about the 3 food groups, and about micronutrients, during the coming months.

When you look at the food pyramid, you can see that it is made in such a way that there are much more of the type of food in the bottom line of the pyramid. This group shows the carbohydrates, and this is the food group from which you need to eat most.

Then comes a layer of vegetables and fruits. You need less of these, but it is from fruits and vegetables you get the most of the micronutrients you need.

Thereafter comes a layer of dairy products and meat and fish. This is what provides you with proteins.

And finally, the fat, of which you do not need much, but you need some.
The food pyramid
Week 2 – Eating from all the colors

Lesson: The micronutrients, what they are and which you need

Introduction
Did you know, that adding color to your plate might add years to your life? The natural pigments that make fruits and vegetables so colorful can also help protect your body from common diseases and illnesses, as you age.

Think color! The bright red of ripe tomatoes, strawberries, cherries, and cranberries are good for disease prevention. The brilliant orange of carrots, the vibrant green of kiwifruit and kale, and the dramatic purple of grapes, helps in vitamin A production. They all have a purpose in your body.

* Red - helps your body to produce vitamin A
* Blue/Purple - helps to improve memory and reduces the risk of diseases
* Green - helps to improve vision and reduces the risk of diseases
* White - keeps the heart healthy and reduces the risk of diseases
* Orange/Yellow - gives you Vitamin A and C to improve your immune system

Instruction

1) The Youth Club leader presents the topic for the lesson.
2) Read the ‘More Knowledge” together.
3) In your Trios, have a brainstorming session, and come up with a list of locally available fruits and vegetables belonging to each of the colors: red, blue/purple, green, white, and orange/yellow. Share your lists in forum. The Youth Club leader writes the lists on the black board.
4) In the Trios, repeat the nutrients you get from each of the different colors.
5) In the Club together, discuss how to be able to eat from all the colors.

More knowledge
Eat foods from all the colors of the rainbow

Red
Red fruits and vegetables, such as raspberries, tomatoes, guavas, watermelons, red cabbages, kidney beans, cherries, strawberries and beet-roots are likely to be good for disease prevention. A medium raw tomato helps your body make vitamin A. Remember there is no daily limit of how much you may eat.

Orange and Yellow
Most orange and yellow fruits and vegetables are rich in helping your body convert some nutrients to vitamin A. This vitamin not only improves night vision, but also helps to keep your eyes, skin, teeth, and bones healthy. It also prevents neural tube defects in unborn infants.

Green
Green vegetables are good for your eyes, bones and teeth, and their vitamin K content helps your blood to clot properly and stop excessive bleeding. A supply of 2 cups of raw spinach daily is all the vitamin K you will need in a day. Other vitamins, particularly vitamins C and E, may lower your risk of chronic diseases. They protect you from loss of vision due to eye diseases.

Blue and Purple
Blue and purple fruits and vegetables contain natural plant pigments with powerful properties that may reduce the risk of getting heart diseases. They also contain elements that may destroy cancer cells. In blueberries, these have shown to fight cancer cells in the lungs, stomach, and breasts.

White
White fruits and vegetables, including apples, pears, bananas, cauliflowers, and cucumbers, are high in dietary fiber and helps to protect you from high cholesterol. They may also lower your risk of getting a stroke.

What is eating according to the rainbow?
Fruits and vegetables are important to your health, because they are rich in nutrients. This is why we learn, that eating five servings of fruits and vegetables a day is very healthy. The health benefits are to be found in the variety of different colors, we eat. Each different color fruit and vegetable contains unique health components. The phrase "eating a rainbow" of fruits and vegetables, is a simple way of remembering to get as high a color variety in your diet, as possible, and in this way maximize your intake of nutrients. The colors of fruits and vegetables are also a small clue as to which vitamins and nutrients they have.

Eat from the rainbow and your health is on track!
Even more...
Potassium, which is found in beans, dark leafy greens, potatoes, squash, yogurt, fish, avocados, mushrooms, and bananas, is a nutrient many people do not get enough of. It does great things for your heart and lowers blood pressure.
Another good food component that many people do not get enough of is fiber, which is found in fruits, vegetables and whole grains.

The need for fruits and vegetables in your diet is growing dramatically with the increase of the spread of new diseases, such as diabetes 2, heart diseases, high cholesterol and high blood pressure, caused by excessive consumption of fatty meats, processed sugars and refined flours.
Week 3 – The dangers of eating sugar

Lesson: What eating too much sugar does to our body

Introduction
You have probably heard this a million times before... but it is worth repeating. Added sugars (like sucrose and high fructose corn syrup) contain a whole bunch of calories with NO essential nutrients. For this reason, they are called “empty” calories. There are no proteins, essential fats, vitamins or minerals in sugar... just pure energy. When people eat up to 10-20% (or more) of their calories as sugar, this can become a major problem. Because sugar does not contain any nutrients, the person simply becomes undernourished. Sugar is also very bad for the teeth, because it provides easily digestible energy for the bad bacteria in the mouth.

What do you know about sugar?
What is sugar?
Why does your body need sugar?
Is sugar dangerous?

Sugar is a carbohydrate, and carbohydrates are the main source of energy. Therefore, sugar becomes an important part of your diet. Sugar is found in most plants and milk. Sugar cane, of all plants, is the plant with the largest concentration of sugar in it. Plants store sugar as energy reserves, the same way us humans store fat as energy reserves. You get quite a large amount of sugar/carbohydrates, when you are eating starch and fruits, and some, when you drink milk.
The sugars you get from the different foods you eat, are good for you and are a part of a balanced diet.

However, it is not the same with white and brown sugar. The white and brown sugar you know is extracted from beetroot or sugar cane, and refined. When sugar is extracted and refined, it loses some of its properties and becomes highly concentrated. It is difficult for your body to process white and brown sugar in its refined form.
Instruction

1) The Youth Club leader introduces the lesson.
2) You read the ‘More knowledge” about sugar together.
3) Discuss what happens to your body if you eat too much sugar.
4) If possible, the Youth Club leader has collected old magazines, newspapers, or advertisements before the meeting starts. Each Trio cuts out pictures, or makes drawings to make a poster with pictures of foods that can be dangerous to your diet.
5) Discuss the diseases that occur when you consume too much sugar.

More knowledge

Natural sugar in foods contains fibers that help your body to know when it has had enough. Without fibers, it is difficult for the body to control when it has had enough, and as a result, the body becomes overfilled with sugar.
Excessive consumption of sugar can be harmful for your health.

Processed foods like soft drinks and sweets can be dangerous to your health if consumed often and in large quantities, because the content of sugar is extremely high. For example, a liter of Coca Cola contains a sugar amount equal to 40 sugar cubes. Right now, you are probably not exposed to excessive consumption of refined sugar, but you might be later in your life, as you grow up and move to other areas. It is important, at this stage of your life, to be aware of the dangers refined sugar might cause to your health when consumed in excess.
Excessive consumption of sugar can cause many health problems, like overweight and heart diseases, just to mention a few. Therefore, a balanced, nutritious diet is important.
Your body’s organs and tissues need proper nutrition to work effectively, and this should be provided in correct amounts. Without good nutrition, your body is more prone to diseases, infections, fatigue, and poor performance.
With a poor diet, you run the risk of having growth and developmental problems.
Bad eating habits can give you problems for the rest of your life.

The dangers of eating refined sugar

Surplus sugar that your body does not immediately require for energy is easily converted to a type of fat that can be stored around your waist and in your hips and thighs. Sugary beverages such as soft drinks, and sweets, are the worst offenders, because their liquid calories do not tell you when you have had enough, and often it makes you crave more, like an addiction. Studies have shown a clear connection between sugar, and obesity and diabetes. Both are diseases that can cause death.

Sugar, sweets, and soft drinks are especially bad for small children. It will make the children troublesome; they will cry more easily, fight or argue with each other, become aggressive, impatient, demanding, and even have hysterical fits. You might think that the children are the problem, but in fact, the problem is that they have had too much sugary food, and this is the reason they become irritated, moody, or hysterical. This is because their bodies are asking for more sugar all the time.
Sugar also spoils the teeth, especially of young children.
The way sugar affects hormones and the brain is a recipe for fat gain disaster. It can get people addicted so that they lose control over their consumption. Not surprisingly, people who consume the most sugar are by far the most likely to become overweight or obese. This applies to all age groups. Many studies have examined the link between sugar consumption and obesity and found a strong statistical association.

1. **Sugar can give you cancer**
   Cancer is one of the leading causes of death worldwide and is characterized by uncontrolled growth and multiplication of cells. Insulin is one of the key hormones in regulating this sort of growth. For this reason, many scientists believe that having constantly elevated insulin levels (a consequence of sugar consumption) can contribute to cancer.

2. **Obesity**
   Obesity is a condition where a person has accumulated so much body fat that it might have a negative effect on the person's health. If a person's bodyweight is at least 20% higher than it should be, he or she is considered obese. Obesity is not just a cosmetic concern. It increases your risk of diseases and health problems, such as heart disease, diabetes and high blood pressure.
3. Insulin resistance can progress to Type 2 diabetes
When our cells become resistant to the effects of insulin, the beta cells in our pancreas make more of it. This is crucial, because chronically elevated blood sugars can cause severe harm. Eventually, as insulin resistance becomes progressively worse, the pancreas cannot keep up with the demand of producing enough insulin to keep blood sugar levels down.

Type 2 diabetes is primarily due to obesity and not enough exercise in people who are genetically predisposed. It makes up about 90% of cases of diabetes. Diagnosis of diabetes is made by a blood test. Rates of type 2 diabetes have increased markedly since 1960 in parallel with obesity. As of 2013, there were approximately 368 million people diagnosed with the disease compared to around 30 million in 1985.
Type 2 diabetes is associated with a ten-year-shorter life expectancy.

<table>
<thead>
<tr>
<th>Diabetes on the rise in Africa</th>
<th>2000</th>
<th>Expected in 2030</th>
</tr>
</thead>
<tbody>
<tr>
<td>South Africa</td>
<td>814,000</td>
<td>1,286,000</td>
</tr>
<tr>
<td>Swaziland</td>
<td>13,000</td>
<td>21,000</td>
</tr>
<tr>
<td>Togo</td>
<td>64,000</td>
<td>184,000</td>
</tr>
<tr>
<td>Uganda</td>
<td>98,000</td>
<td>328,000</td>
</tr>
<tr>
<td>United Republic of Tanzania</td>
<td>201,000</td>
<td>605,000</td>
</tr>
<tr>
<td>Zambia</td>
<td>70,000</td>
<td>186,000</td>
</tr>
<tr>
<td>Zimbabwe</td>
<td>108,000</td>
<td>265,000</td>
</tr>
</tbody>
</table>

*The chart shows how diabetes is expected to develop if nothing is done to change lifestyle.*
Week 4 – Making healthy snacks

Action: Producing healthy snacks

Introduction
You have read about the food pyramid and the importance of eating from all the food groups, and how much to eat from each group to get a balanced diet. You have read about vitamins and minerals. And you have read about why eating too much sugar can make you addicted to sugar, and that this is very harmful for your health.

Still most of us like to eat sweet things, and most of what we get as snacks is made with a lot of sugar. So what do you eat if you get hungry between meals or you need some refreshment? When you are hungry, you lack energy and become tired easily. You cannot concentrate and learn well at school. Many of you have to walk long distances to school, and spend a long time away from home.

To ensure proper growth and development, and be able to concentrate at school, it is a good idea to bring an energy and nutrient-rich snack to eat when you get hungry.

It is easy to make snacks that provide energy. They can be eaten raw or cooked, and can fill the gap between the main meals. They can be made from boiled or roasted roots and tubers (cassava, yams, plantains, potatoes); boiled or roasted green maize; roasted groundnuts or oilseeds such as melon or pumpkin; bread spread with groundnut paste; fried fish, meat or sausages; eggs; dairy products such as milk, curd or cheese; insects such as locusts or termites; and fruits such as bananas, oranges, mangoes, or sugar cane. Such foods provide both energy and nutrients.

Instruction
1) Read the introduction together.
2) Look at the recipes and distribute them between your Trios.
3) Each Trio makes a snack, following the recipe.
4) Taste each other's snacks.
5) Consider if you should start to make snacks for all the children in your family who are going to school.

More knowledge
On the next pages, you will find six recipes for healthy snacks. They contain a moderate
amount of sugar, or sugar from fruits. They are made from fruits, nuts and vegetables mixed and treated in a delicious way. All the snacks also contain fibers.

Recipes for healthy snacks

**Moinmoin (steamed bean flour cakes)**

*Ingredients:*
- Bean flour
- Water
- Cassava flour (if necessary)
- Pepper, ground
- Onion, ground
- Salt (optional)
- Banana leaves
- Dried fish or boiled eggs (optional)

*How to do:*
1. Mix bean flour with water to form a paste. (A little cassava flour can be used for binding the mixture.)
2. Add pepper, onion and salt (and other ingredients, if desired) to paste.

**Sweet potato pastry**

*Ingredients:*
- Sweet potato (preferably yellow-fleshed), grated
- Sugar
- Some wheat flour
- Pineapple juice or coconut milk (optional)

*How to do:*
1. Mix ingredients together.
2. Bake as you would other biscuits.

**Peanut sweets**

*Ingredients:*
- 1 cup sugar
- 1 cup water
- 1 cup shelled and roasted peanuts
- Vegetable oil

*How to do:*
1. Dissolve sugar in a pan of water.
2. Heat the pan and stir until a syrup forms. When syrup is golden brown, add the peanuts and mix well.
3. Pour the firm mixture on to a large oiled dish, spreading it into a 1-1½-cm-thick layer.
4. Let the mixture set, but before it gets hard, cut it into small squares.

**Fried plantain**

*Ingredient:*
- 2 ripe but firm plantain, peeled and sliced
- 1 cup cooking oil, preferably red palm oil
- Salt
- Ginger
- Turmeric (optional)

*How to do:*
2. Season.

**Peanut biscuits**

*Ingredients:*
- 12 tablespoons crushed raw peanuts
- 4 tablespoons sugar
- 1 egg
- 6 tablespoons maize flour
- Water
- 1 tablespoon vegetable oil

*How to do:*
1. Mix the ingredients together.
2. Shape mixture into flat cakes.
3. Cook cakes slowly on a greased hot plate or frying pan.

**Sweet potato pastry**

*Ingredient:*
- Sweet potato (preferably yellow-fleshed), grated
- Sugar
- Some wheat flour
- Pineapple juice or coconut milk (optional)

*How to do:*
1. Mix ingredients together.
2. Bake as you would other biscuits.
You could use the opportunity to tell your family about vitamins and minerals, and why they are very necessary for all people, especially children, pregnant women, and people living with HIV or TB. You could also develop your own ‘Trade Mark’ by the way you pack and present the snacks. Maybe you can even sell them on the local market.

Here are some pictures for inspiration:

<table>
<thead>
<tr>
<th>Cassava cake</th>
<th>Banana scones</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ingredients:</strong></td>
<td><strong>Ingredients:</strong></td>
</tr>
<tr>
<td>200 g raw cassava, grated</td>
<td>2 bananas</td>
</tr>
<tr>
<td>1 egg</td>
<td>½ cup milk</td>
</tr>
<tr>
<td>½ cup milk</td>
<td>30 g butter</td>
</tr>
<tr>
<td>75 g butter</td>
<td>2 cups self-raising flour</td>
</tr>
<tr>
<td>225 g sugar</td>
<td>Salt</td>
</tr>
<tr>
<td>50 g wheat flour</td>
<td>How to do:</td>
</tr>
<tr>
<td>2 teaspoons baking powder</td>
<td>1. Mash bananas.</td>
</tr>
<tr>
<td>Salt</td>
<td>2. Add milk and mix.</td>
</tr>
<tr>
<td><strong>How to do:</strong></td>
<td>3. In a separate bowl, cut butter into flour and salt.</td>
</tr>
<tr>
<td>1. Mix cassava with egg and milk.</td>
<td>4. Add banana and milk mixture to flour and butter mixture. Mix well.</td>
</tr>
<tr>
<td>2. Beat butter and sugar until creamy.</td>
<td>5. Roll out dough. Use glass or jar to cut into round pieces.</td>
</tr>
<tr>
<td>3. Mix butter and sugar mixture with the cassava, egg and milk mixture.</td>
<td>6. Bake in hot oven (230°C or 450°F) for about 15 minutes.</td>
</tr>
<tr>
<td>4. In a separate bowl, mix together flour, baking powder and a pinch of salt. Add flour mixture to egg mixture. Mix well.</td>
<td></td>
</tr>
<tr>
<td>5. Pour into cake pan and bake for 40 minutes.</td>
<td></td>
</tr>
</tbody>
</table>

You could use the opportunity to tell your family about vitamins and minerals, and why they are very necessary for all people, especially children, pregnant women, and people living with HIV or TB. You could also develop your own ‘Trade Mark’ by the way you pack and present the snacks. Maybe you can even sell them on the local market.

Here are some pictures for inspiration:
Week 1 – Growing our own nutritious food is smart

Course: Good advise for starting a vegetable garden at school and at home

Introduction
Health has something to do with what you put in your stomach. The Youth Club should teach and inspire the communities on the importance of growing your own food.
All the nutritious foods your body needs can be grown locally in the gardens. So growing your own nutritious food is a smart thing to do for you and your family.

Gardening is partly an answer to keeping your family healthy.
Producing healthy foods is good for many important reasons. Generally, the most important factor in maintaining good health throughout your life is to eat healthy foods. So, to optimize your health, you must pay attention to this statement.

When having your own garden, you can decide what to grow, and decide to use healthy farming methods. Freshly produced greens, which are not contaminated by chemical fertilizer or pesticides, are good for you. They will build up your body with all it needs, and will greatly improve your chances to live a long and healthy life.
What you plan to farm in your garden can give you enough food to eat, and ensure food security for your family.
What you produce is far healthier than the food you can buy.
It is the smart thing to do.

Economically, when the garden is up and running, you can expect to get better quality food, and more food variety, for half the price you pay in local stores and markets. That is worldwide general knowledge.
The more experience you get with gardening, the more you gain. You will get a better quality produce, and it will become cheaper to produce.
For the local community, gardening will have a great impact. The more gardens there are, the cheaper food products will be available for the community and for sale, and therefore more people would be able to afford to buy other necessary items.
Instruction

1) The teacher introduces the course and explains, by using the “More knowledge”, why growing food locally can have a big impact on the health of the families.

2) Work in the Trios to list all the benefits of growing enough food locally for everyone to get enough to eat.

3) The Club discusses how it can participate in promoting local vegetable production by making or extending a school garden, and by establishing back yard gardens at home.

4) The Club decides where to find space for growing vegetables at the school, and at home, before it meets again. A committee is selected to agree with the headmaster on the plan for the school garden.

More knowledge

Can the farmers grow enough food for everybody in the world to have enough to eat? There are many discussions on this subject. Especially because food production has become something, that many big farmers do, only for the sake of earning money. So, instead of thinking about how everyone could get work and food from farming, the industrial farmers only think about how they can earn the most money. That is often by having very big farms; using machines instead of people to do the work; using genetically modified seeds that produce big vegetables, or big plants which do not have a rich nutritional content like the locally produced food; and by spreading fertilizers and pesticides that poison the crops, the land, water, and destroy the soil over time. With use of these methods it might look like they produce a lot, but in reality the small farmers, who care for their land and crops, can grow much more and better quality food.

If we look at all the improvements that can be added to local farming, most places in the world can definitely grow enough food to keep hunger away, and keep all the families healthy.

Local actions for food security

The following is a list of things that can be done to produce enough food and stop hunger:

Sustainable farming - improving the soil

Healthy farming requires healthy soil that is full of nutrients. Soil is destroyed and depleted, if the land is used without making sure that as much organic material as has been harvested, is returned to the soil every year.

This organic material can come from compost, vermin culture, green manure, animal manure, human urine, effective microorganisms, organic tea compost, mulching (covering soil with plant material), and by crop rotation that includes growing nitrogen fixing plants such as beans or Lucerne, in a field every 3 to 4 years. It also helps to test the soil to find out if it needs any additional minerals.

Do not harm the soil

It is important that the farming methods do not harm the soil. When soil is plowed, the soil structure is disturbed and the soil is without plant cover, exposed to sun and wind. By using conservation farming, the soil is disturbed as little as possible. Instead of plowing, the farmer
digs potholes where the maize or other plants are sown in soil mixed with compost. If the land is big, the farmer uses ripping, meaning making a line in the soil in which the corn is sown. The soil is always covered with mulch (dead plants or grass) to avoid erosion by sun, wind or rain. Rotation between different crops means that a new type of crop is planted every year. In this way, the same nutrients are not used year after year, and the spread of diseases from one year to the next is avoided. Mulching also keeps the soil moist and helps more rainwater to stay on the field. Besides, the farmer makes sure that no rainwater is running away from his field by making contours and digging graves to trap the water.

**Protecting the crops in a gentle manner**

The crops should be protected without resorting to strong pesticides, herbicides and fungicides. This can be done by using shade nets, natural insecticides (chili pepper, garlic, tephrosia, neem), by paying close attention to the gardening calendars, and by manual weeding instead of spraying.

**Food Security - Processing of food crops**

Processing local crops can improve their usefulness. Oil can be produced locally from coconuts, peanuts, sunflower seeds, etc. A solar drier, can preserve food that might otherwise go to waste.

A bamboo or clay cooler can be used to store perishable foods for a while, by use of cooling through evaporation of water. A storage house with passive cooling, can maintain foods better just by using the wind for cooling. Making preserves out of seasonal fruits can widen their use. Drying, salting, smoking, and fermenting, are other traditional ways of preserving food, using simple technologies.

**Food preparation**

Solar cookers can be used to prepare food without the use of firewood. A firewood saving stove can reduce the need of firewood to the half. A magic box (a hay box), can finish cooking food that has already been heated to boiling point. Steaming instead of frying and boiling food will preserve more of its vitamins.

**Protecting stored food**

It is estimated that 10-40% of all harvested food is lost in one way or another. Smart storing structures, use of bio-pesticide plants such as tephrosia, and other methods to protect food from rats and insects, can reduce this loss of food. Ventilation and packaging of foods in the right way can also reduce loss, also during transport. Control of humidity can prevent fungus, mold and diseases that may destroy stored food.

**Other Local Actions to stop hunger**

The local community and local leaders can work together to improve food security in many ways:

Teach the farmers about healthy and productive soils - use of compost, conservation farming, crop rotation etc. and how to take good care of crops by using irrigation, water conservation, vetiver grass, natural pesticides, shade nets, etc.

Ensure that the village has clean water and good sanitation - water purification systems and latrines.
Teach the farmers how to get the most out of their crops - harvest, preservation of food, fermenting, malting and selling at a good price.

Promote that farmers grow enough food and nutritious foods for local use, such as moringa trees, soy beans, amaranth, and others. Work together to improve tree cover, by producing and protecting trees, planting fast growing trees like bamboo and gum trees, limiting bush fires and using firewood saving stoves. For each of these methods there needs to be demonstrations, explanations, exhibitions and speeches, by local leaders and authorities.

**Promote food production in your community**

Food production can be promoted in many ways. Schools most often have some outdoor areas where food can be produced. This may also serve as a training ground for the students and the community in sustainable farming. Projects, churches, and health posts in the area can promote gardens for the growing of healthy vegetables and fruits. Most families can find a small piece of land for a backyard garden. Commercial enterprises often have outdoor areas where some food could be produced. People who live in cities may also produce food in the gardens around their homes, and encourage others to do so as well.

*Growing pumpkins on the roof*

*If you have no soil, you can plant in boxes or sacks*
Week 2 – What to grow and how to do it

Lesson: How to solve the most common problems of growing vegetables

Introduction
A well-designed and maintained school garden, or backyard garden can play a very important role in improving food security for children in the school, and for a family. It can also become a good example for the community to copy. Gardening is a fun and interesting way to learn about nature. A school garden has many benefits – but not just for you as the students who learn and work in the garden, and for those that enjoy the food produced. When you learn new gardening techniques, you can pass them on to your parents and other people.

The school garden will be created, managed, tended, and harvested by you. So, you can really see that you are creating something new and useful.

But first, you have to get started.

Here is a list of the five most important things to consider when starting a garden:

* Choosing the site
* Preparing the site
* What to plant in the garden
* How to maintain the garden
* Deciding who shall eat the food

Instruction
1) Read the “More knowledge” together.
2) Make a visit to a local gardener, and learn from him how to start a garden.
3) In Trios, discuss all the points mentioned in the text, and decide how to solve them in the school garden and in the backyard gardens.
4) Discuss what to grow and how to get seeds and seedlings. Go for vegetables that are easily available, and that you know can grow well in your local area.
5) Decide who shall eat the food.
More knowledge
Some common problems and how they can be solved:

1. To have enough water
To secure enough water is one of the determining factors on where to place a vegetable garden.
Water can come from a local river or canal, it can come from a well, it can come from rain, and it can come from reservoirs of stored rainwater.
If you can only get water from rain, it is a good idea to harvest rain for later use. This can be done by making sure that rainwater runs down into an existing well, or by digging ditches across the garden so that water is running into the ditch when it rains, and from there seeping into the soil instead of running away. Rainwater can also be harvested from solid roofs, from where the water runs, via a pipe, into a big tank built of concrete. It is also possible to direct the water exactly to where it is needed, by using different types of drip systems.

2. To have good soil
The best vegetable soil is loam soil. Loam soil is a mix of sand, silt or clay, and organic matter.
Loam soil is loose and looks rich. Loam soil normally absorbs water and stores moisture well. Sandy and clay soil can be made into good vegetable soil, by mixing a lot of compost into the top soil. Compost can be added by covering the field with the straw from last year, or compost can be produced by piling layers of organic matter from the field, straw, cow dung, waste from the kitchen, ash and soil on top of each other until the pile is 1.5 m high. Then water the pile and cover with leaves or straw. Keep the pile moist and turn everything around once a month for 3 months. Then the compost is ready. It has become dark and good smelling, it has become humus. You can also let cows or other animals such as goats, ducks or chicken walk in the field before the vegetables are sown and dump their excrements.

3. To have good methods for controlling diseases and pests in the plants
Insect pests are responsible for about 20-30 % of crop destruction. But there are many safe, natural, and simple methods of protecting plants.

Aromatic (strong smelling) plants
Leaves from any strong smelling plant, such as ginger, lantana, tomato, garlic or pepper can be used and will keep most insects away. It can also be made in liquid form with a mix from the different plants. Dry the plant material and grind it into a powder. Mix the powder with boiling water and allow it to cool. Experiment with how much powder it will take per liter of water to work. Spray it on the plants when you see insects. Spray more often in the wet season, because rain washes the substance off the plants.
Ash
Soft-bodied insects such as aphids, caterpillars, roundworms, grasshoppers, termites, stalk borers, cutworm and others, as well as mildew and fungal diseases can be killed by dehydration when dusted with ash. Ash can also be placed thickly around the plants, but it should not touch the stem of the plant.

Collecting
Insects can be collected from the plants. When you pick them up, drop them in a bag so they do not just return to the plants.

4. To protect the garden from stray animals
In order to keep animals away from your vegetable garden, you will need to make a fence around it.
Initially, you can make a fence by placing dried, sticky branches around the garden. At the same time, it is a good idea to build a living fence, but it will take some time to grow.

A fence with live fencing posts:
Moringa, Gliricida and other acacias can be used for live fencing posts. They will need protection to grow to a height where the animals cannot eat them. Between the trees, you place a mesh made of bamboo strips, tree branches, palm leaves or grass. Wire can also be used.

Living fences:
Agave, with its big pointy leaves, makes a tightly sealed fence. It is easy to grow from sprouts. It dies after 10-15 years. Normally new shoots will come up. Otherwise replanting is needed. Jatropha is often used for living fences. It grows very fast, is easy to develop from cuttings, and animals do not like the smell of it. After 2 years, it is possible to collect the seeds, and use their oil as lamp oil (not for eating as they are poisonous). Espinhosa is a plant often used for living fences because of its long thorns. It is easy to propagate from cuttings. It grows well in sandy soil.
Look out for local fast growing trees and bushes usually used as fences.

Look forward to have fresh vegetables on the table
Week 3 – Where to place the garden

Lesson: The ideal place for gardens

Introduction
There has never been a more interesting time for vegetable gardening. It makes sense on so many levels. It saves money, improves the environment and it improves our health. Making a vegetable garden is an opportunity to grow interesting vegetables, fresher than money can buy. It is the key to children being more adventurous with food. If they grow it, they will eat it – and that’s exciting.

Give the vegetable gardens the sunniest land you have. Sunshine makes for stocky, disease-resistant plants and sweeter tasting onions, carrots, tomatoes and chilies. If you need shade, for other vegetables, it is easy to create with some dry grass.

Most ordinary soils are fine for vegetable growing, but avoid extremes like sandy soils or heavy clay soil. If your soil layer is thin – less than the length of your spade’s blade - or full of stones that might cause some of your crops to change their taste, build raised beds. Clay soils are nutrient-rich and good for crops. Keeping your vegetable garden neat and tidy by clearing weeds gets rid of the places where pests and insects hide. Don’t keep long grass adjacent to your vegetable garden, as it will attract animals that will raid your vegetables.

Where possible, put a path with compacted soil in between the beds for easy access to the whole garden.

Starting with a “clean”, weed-free area is the key to success with vegetables. Otherwise, you risk an endless war to prevent your vegetables from being raided by insects. Avoid chemicals to control the weeds, pull out weeds and their roots as you dig.

Make sure the land you choose is right before you commit yourself. Choose a site close to where you live.

- Some sites are more family-friendly than others. Places with deep pools of water can be dangerous.
- A short distance to the water supply and the place where manure is dropped reduce time, and effort carting the stuff about.
- If possible, avoid places with many trees, because the shade can affect the growth of your crops.
Raised beds are ideal for making a garden more controllable, involves less bending, improves drainage on heavy soils and divides your garden into manageable potions. Make this a no-go area for children and pets.

Make the beds wide enough, but no wider than you can reach comfortably into the middle of the bed, without treading on the soil. Add compost manure – mix 2 parts of soil with 3 parts of compost manure.

**Instruction**

1) Read the “More knowledge” together.

2) The Youth Club makes the final decision on where to place the school garden and the backyard gardens, and how to get water to the locations.

3) Decide what to grow in the school garden and in the backyard gardens.

4) Take note of the information and draw a plan for each of the gardens. Maybe the Trios decide to work together on establishing the backyard gardens at home.

5) Decide when to start establishing the gardens.

6) Make a list of things you will need to bring. Look for seeds and plants to plant at school or at home. If you already have gardens at home, maybe you can share seeds and plants with each other. For some plants or trees you can collect seeds from wild plants.

**More knowledge**

*How to plan a kitchen garden*

**A) Lay out the plan for the garden with the right measurements**

The first step in making a kitchen garden is to draw up a plan of the garden. This plan is a "map" of your future garden. It should include the following information:

- Size and dimensions of the garden
- The orientation of the garden, considering the sun, sloping of the land, trees, water source and other environmental conditions
- The design of the beds and what to plant in each of them.
- Start with 10-15 different types of plants
- Make space for a nursery
- Make Space for a compost pile
B) Preparing the ground for the kitchen garden

- Analyze the site you will use for the garden, and take measurements. (Use a measuring tape or use large steps – a step is about 1 meter).
- Think of a way to protect the garden, surrounding it with a fence. The cheapest way to surround the garden is to use a living fence of jatropha, mulberry or some thorny plants. A fence is very important for a vegetable garden, because it can prevent damage caused by pests and roaming livestock. When you have decided what kind of fence you will use, arrange to plant it. Place dead sticky branches around it, to allow it to grow up.
- Clean the area outside the fence, in a strip about 3 meters wide, all the way around, to avoid weed seeds from landing in the garden.
- Planting an extra barrier of plants such as chandelier (Euphorbia trigona) along the outside of the fence to keep the animals away, might be a good idea. This plant has a sticky and toxic sap that repels most animals.
- Prepare compost to use in the garden, or get hold of some manure, if possible.

C) Make the garden

- Start by cleaning the land, which is now surrounded by a fence. Remove stones, shrubs, grasses and waste. Level the ground if necessary.
- Turn the soil and make it loose with a hoe, to a depth of at least 10 cm. This is hard work, so it is a good idea to help each other in the school garden and in the families or in the Trios.
- Measure and mark the areas you will use for the beds, and the paths between them. Follow the plan you have already made. Use a rope or a wire to make straight lines.
- Add a layer of compost to the beds.
- Shovel earth from each side of the beds, so the beds will become a little higher and at the same time, the soil will mix with the compost. This method creates a fertile soil that will produce healthy plants.
- Now you are ready to plant!

D) Plant your vegetables, fruits and local plants

Look at your initial list of crops, and decide what you want to plant. You must strive to plant a wide variety of species. A wide range allows you to obtain more nutrients and healthier foods.
When sowing or planting you should consider the following:

- The sowing or planting methods are as varied as the type of plants. For example, small seeds such as carrots are spread on the soil, whereas larger seeds such as beans and corn are sown one by one. For some species, it is good to grow seedlings in a nursery, and later place them where you want them to be. For example, papaya can be sown in nurseries and transplanted later.
- Most seeds must be sown in soil at a depth twice the size of the seed. The space between plants should be sufficient for the plants to have space when they are grown up. In the case of carrots, it is necessary to thin the rows by pulling up some of them.
When you decide which plants you should grow besides each other, take into consideration the variety of the depth of their roots. It is preferable to have varying levels of roots, so that each plant can use the nutrients at different soil depths.

Some plants prefer lots of sunlight, while others grow better with more shade. Plan your garden so that each plant has favorable growth conditions.

Put a sign at each end of the rows, with the names of the plant and the date it is sown or planted, in order to monitor its progress. Pictures will help you to recognize the different species and remember what you have sown.

Start planting!

E) Maintain the school garden together – at home, the whole family can be involved

- In weeding the garden
- In making sure that each plant is treated according to the instructions on the seed packets.
- In taking care that the plants are always getting enough water. Sometimes, you would need to give water twice a day.

F) Calculate the expected results
Before you start planning the beds, or before planting, you can make a rough calculation of the expected results. Here are some examples of how to calculate the expected outcome of 11 crops. If you have other plants, you will need to find out what the key figures are for each of these crops.

1. Tomatoes: You can estimate the production of tomatoes per plant. A tomato plant, on average, produces 700 g of tomatoes. You calculate your needs and decide how many tomato plants you should plant.

2. Eggplants: An eggplant can, on average, produce 6-7 fruits. You can calculate how many plants you need to plant.

3. Garlic: Calculate the output per square meter. 100 square meters of garlic should, on average, produce 100 bulbs of garlic. From that, you can estimate how much you need to plant.

4. Cucumbers: A cucumber plant, on average, produces 20 fruits. Calculate your needs and find out how many plants you need.

5. Cassava: A cassava plant, on average, can produce up to 5-6 kg of roots. Calculate the amount of cassava you need, and plant accordingly.
6. Potatoes: A potato plant will, on average, produce 500 grams of potatoes. Calculate your needs - if it is 2 kg per week, you have to plant 100 plants, or a little more to compensate for possible loss.

7. Peppers: A pepper plant, on average, produces between 6 and 10 peppers. Figure out how much you use in a week, and plant a sufficient number of plants.

8. Onions: You can calculate onions per square meter. In an area of 1 meter x 1 meter you should plant 100 onions. They should be planted with a space of 10 cm between the furrows. This means that you can plant 10 rows of 1 meter - or 10 meters of onions, that will give you 100 onions.

9. Carrots: Carrots are sown by putting 4 to 6 seeds in a 2 cm wide opening, with a space of 2 cm between the seeds. If you use 1 x 1 meter, you can make 20 furrows in a square meter, and get produce of approximately 625 carrots. If you sow one square meter every 4 to 5 weeks, you will have carrots throughout the year.

10. Cabbages: Cabbage should be planted in the nursery and later be transplanted. Using the example of a plot of 1 meter x 1 meter, you should plant the saplings with a space of 15 cm between the plants, or 6 furrows of 6 sprouts per square meter. Then you should produce approximately 36 heads of cabbage per square meter.

11. Lettuce: Lettuce should also first be sown in the nursery. When you transplant the saplings, leave a gap of 10 cm between each plant. In a bed of 1 meter x 1 meter you can make 10 furrows and produce approximately 100 heads of lettuce per harvest.

E) Good to know about companion plants

What are companion plants? Companion plants are called this, because they help each other to grow better. For example, when the roots of two plants have different lengths, they do not need to compete for the same nutrients; or a companion plant may attract beneficial insects, and repel harmful insects, and in this way support its neighboring plants. Harmful insects and pests also spread easier, if all the plants in a field are of the same type.

Hereby a description of how some companion plants supports each other:

<table>
<thead>
<tr>
<th>NAME</th>
<th>HELP THE FOLLOWING PLANTS</th>
<th>ARE HELPED BY THE FOLLOWING PLANTS</th>
<th>DO NOT PLANT NEAR THEM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Onions, garlic, leeks</td>
<td>Tomatoes, chilies, potatoes, mustard, cabbages</td>
<td>Carrots</td>
<td>Beans, peas, parsley</td>
</tr>
<tr>
<td>Cabbages, cauliflower</td>
<td>Potatoes, maize</td>
<td>Onions, garlic</td>
<td>Tomatoes, peppers</td>
</tr>
<tr>
<td>Plants</td>
<td>Companion Plants</td>
<td>Companion Plants</td>
<td>Companion Plants</td>
</tr>
<tr>
<td>--------------</td>
<td>-----------------------------------------</td>
<td>-----------------------------------------</td>
<td>-----------------------------------------</td>
</tr>
<tr>
<td><strong>Beans</strong></td>
<td>Spinach, lettuce, rosemary, dill, carrots, beets, cucumbers</td>
<td>Eggplants</td>
<td>Tomatoes, chilies, onions, garlic</td>
</tr>
<tr>
<td><strong>Carrots</strong></td>
<td>Tomatoes, onions, lettuce</td>
<td>Leeks, beans</td>
<td>Dill, radish</td>
</tr>
<tr>
<td><strong>Cucumbers</strong></td>
<td>Peas, beets, carrots</td>
<td>Tomatoes</td>
<td></td>
</tr>
<tr>
<td><strong>Lettuce</strong></td>
<td>Beans, carrots</td>
<td>Celery, cabbages, parsley</td>
<td></td>
</tr>
<tr>
<td><strong>Potatoes</strong></td>
<td></td>
<td>Carrots, cucumbers, tomatoes</td>
<td></td>
</tr>
<tr>
<td><strong>Tomatoes</strong></td>
<td>Peppers, asparagus</td>
<td>Onions, celery, carrots</td>
<td>Maize, peas, dill, potatoes, cabbages</td>
</tr>
</tbody>
</table>
Week 4 - Making the garden

Actions: Making vegetable gardens at school, and at home

Introduction
In this action, you are going to start working on establishing the vegetable garden at the school, and later at home. If you already have a school garden, or a home garden, you can chose to upgrade what you have, or to expand the garden with more vegetables. Today you will spend 4 hours working in the school garden together in the Youth Club. Maybe it is not possible for you to finish the whole action in 4 hours, so in that case you will have to agree on a time for finishing.

When the garden is established with seeds or plants, it needs to be maintained. In the beginning, by watering to keep the soil moist and later you will also need to weed and look out for insect pests.
If possible, invite a local farmer to instruct you when you start the garden. Otherwise, follow the instruction hereunder.
Some of the tasks are good for all of you to do together, and some you can divide among you and do at the same time.

Instruction
1. Mark the corners of the garden with sticks.
2. Build a fence around the garden, using dead sticky branches.
3. Clean the garden for stones, grass or other things lying around.
4. Keep all the organic material for compost and mulching.
5. Clean the area outside the fence in a strip about three meters wide, all the way around, to avoid weed seeds from landing in the garden.
6. Mark the beds with string. Mark the space for the compost heap and the space for the nursery.
7. Start to build a compost heap with layers of soil, cow dung, ash, dead plants or other organic material.
8. Turn the soil in the beds and make it loose with a hoe, to a depth of at least 10 cm.
9. Cover the beds with mulch. If you already have compost, you can mix it in the beds by shoveling soil from both sides and heap it on the middle. Mix well.
10. Follow your plan for the layout of the garden, and sow and plant with the correct depth and distances between the plants.
11. Prepare soil for the nursery and build a shade of sticks and a roof of straw.
12. Sow the plants that need to be grown in a nursery. You can sow in raised beds, then it will be easy to move the plants on a shovel.
13. Before you end the action, make a duty roster for watering and for taking care of the garden.

More knowledge

Making of Beds
There are two common ways of making vegetable beds: the raised beds and the traditional rows. In general, it is a good idea to define the garden beds with a width of 1.2 m, and as long as you want them to be, with a 60 cm path between them. You can sow two or three different rows in each bed, according to the space the plants you are sowing needs.

Planting
When you have finished digging, smooth the surface of the bed with a rake, then water thoroughly to prepare the soil for planting. Avoid stepping on freshly tilled soil. That will compact the soil and undo all your hard work.
Week 1 – Early marriage and pregnancy

Course: The problems of early marriage and early pregnancy

Introduction
Listen to these stories of what some young girls are going through.

Patricia was 12 when she married John who is four years her senior.
"My parents said they needed to benefit from my marriage before they die, and that's why they ordered me to stop going to school and get married to him... They charged him 1000 kwacha (110 USD) for a bride price; he paid half and they gave him a field of maize to cultivate for them," she said.

Agnes Lungu, 56, is full of remorse, and still regrets the day she and her husband married off their 15 year-old daughter, to a man, they had chosen for her, in order for them to get the bride price, so they could help to solve the family's problems.

“I did not know about the harmful consequences of a child marriage, and I feel very guilty I did this. It's a wrong practice and nobody should do it,” she says.

Seventeen-year-old Agnes tells: "My parents sat me down and told me I was no longer their responsibility. They wanted me to move out, and start a life of my own," while sitting in the village of Chibombo, two hours' drive from Zambia's capital Lusaka. "Things moved faster than I expected - when a stranger paid a bride price to my parents. I had no say in the matter," she says, tears welling in her eyes. "I didn't choose this life and I'm not happy here."

Catherine’s story: “I started having sex when I was 14 years old. I was having sex out of ignorance, just enjoying myself without knowing the consequences. I fell pregnant at the age of 18 years. I was rejected by my father, and the health care providers were not any kinder. I had to have a cesarean to give birth. My mother, who had supported me, was also pregnant, and she unfortunately died three months after she gave birth. So I was forced to care for, and breast-feed my baby, and my baby brother. I endured economic hardship while struggling to provide for the babies and my grandmother, with little support from society. Looking back, I wished I had access to sexual reproductive health information that would have guided my actions as a teenager, and supported the care for my baby, so I could have returned to school.”

Each year, 15 million girls in the world are married before the age of 18. That means that 28 minor girls are married off every minute. Compared to girls, there are far fewer cases where young boys are married off. Girls are the biggest
victims of early marriage and early pregnancy. Early marriage is the biggest casualty of premature pregnancy. In Zambia over 14,000 girls left primary school in 2013 and 16,000 girls dropped out of school in 2015. The majority of them – 13,250 – were at primary level education. Zambia is ranked at the top of all countries for child marriages.

There are many reasons for early marriages, but one of the biggest is being among the poor. Many early marriages are caused by parents who want to use the marriage of a child as a solution to solve family problems. In some cases, girls prefer to get married so that they can get away from the poverty their families are facing. All these reasons, however, do not justify the often devastating consequence, which will come with early marriage.

Early marriage exposes girls to HIV/AIDS and STIs, as most of the girls get married to older men who already have their own families. Many girls will drop out of school, making them vulnerable to many problems related to the lack of education. Many girls also go through birth complications, as their bodies are not mature enough to handle a pregnancy. On top of that, many also go through domestic violence and sexual abuse.

As youth we have the obligation to stop this bad practice. It is robbing the future from these young girls and boys. Let’s join forces and fight it.

Let’s fight for our right to a proper education.
Let’s fight for our right to determine our own futures.
Let us be our own liberators and bring sanity to the new generations.
Let us stop early marriage and early pregnancy with our generation.

**Instruction**

1) The teacher explains in this lesson about the traditions of early marriages and the consequences for the girls, including what happens during birth, and what happens with a woman’s body, before and after.

2) In the Trios, put up all your questions about early marriages.

3) Answer the questions in forum and discuss what examples you have seen in your local area? What you think about early marriage? How can a girl refuse to be married? How can the parents be influenced to not marry off their daughters in their teenage-years? What can we do to help each other, and especially girls, to be allowed to continue in secondary education?

**More knowledge**

In Zambia, the legal age for marriage is 18 years. At this age, a person is also allowed to vote, to be elected in political organizations, and to assume public positions.
However, it is possible for 16 and 17 years old boys and girls to enter into marriage legally, but it requires parental consent. Anyone under 16 is considered a Minor, and sexual abuse or having sexual intercourse with a boy or girl less than 16 years is a serious offence, punishable by imprisonment of up to 25 years. Young people under 18 years should not have to bear the burdens of the responsibility of a family, neither physically nor mentally, before having become a grown up and a responsible member of society.

UNICEF supports a campaign to end child marriages in Zambia: Let girls be girls, NOT brides!

CHIPATA, Zambia. (By Betty Chella Nalungwe / UNICEF).
Child marriage is a violation of human rights whether it happens to a girl or a boy, and it represents one of the prevalent forms of sexual abuse and exploitation. The harmful consequences include separation from family and friends, lack of freedom to interact with peers and participate in community activities, and decreased opportunities for education. Child marriage can also result in bonded labor or enslavement, commercial sexual exploitation and violence against the victims. Child marriage is often the product of gender discrimination that values the survival, development, protection and participation of boys more highly, than that of girls.

The Ministry of Chiefs and Traditional Affairs (MoCTA) with support from other government line ministries, cooperating partners, and civil society has embarked on a nationwide campaign to end child marriages in Zambia. The first of the planned provincial-based campaigns took place here on 13 April in Luangeni Village in His Royal Highness Nkhosi Yama Nkhosi Chief Mpezeni’s chiefdom in Zambia’s Eastern Province.

Eastern Province has Zambia’s highest rate of girls married off before the age of 18 years, at fifty per-cents (DHS, 2007). The national launch was led by Zambia’s First Lady Dr. Christine Kaseba and included home visitations to couples affected by child marriages. A total of seven homes were visited and the UNICEF Deputy Executive Director, Ms. Geeta Rao Gupta was one of the dignitaries that participated in the home visitations, as well as the launch events.

“I can assure you this was not a forced marriage even though we did not plan to get married. I damaged her (impregnated her), and that is when I decided to marry her, and this is why we both stopped school to look after our baby,” said Joachim Banda who is 18 years old.

Mr. Banda and his 16 year old wife Mildred Sakala, and their nine-month-old baby Salome Banda live in Luangeni village. They opened up about their life stories after the team leader from the provincial child development section of the Ministry of Community Development, Mother and Child Health, Ms. Josephine Phiri, briefed them about the nature of the visits and that there were opportunities for senior government officials to learn “first hand” about child marriages.

When the couple was married, Mildred was in grade 5 and Joachim was in grade 7. Because they are both out of school now, the chances that baby Salome will be able to attend school, remain bleak.
When a girl marries early, she drops out of school and often has a child within a year. That means, that the cycle of poverty continues in this country.

We can only solve this problem if we all work together.

Joachim and Mildred expressed interest in going back to school, though they are challenged with how they would do that, with their parenting responsibilities. Joachim explained he tries to make a living by engaging in piecework.

Representing the United Nations system at the launch of the nationwide campaign to end child marriages, UNICEF Deputy Executive Director, Ms. Rao Gupta, said that child marriages in Zambia affects over 40% of girls across the country. “It is a gross human rights violation, which constitutes a grave threat to young girls’ lives, health, and future prospects.

Child brides are at risk of violence, poverty, HIV and AIDS and complications related to pregnancy and childbirth, which in developing countries like Zambia are the main causes of death among 15-19 year-old girls,” said Ms. Rao Gupta. She re-affirmed the United Nations support to national interventions to end child marriage in Zambia, which will not only contribute towards the attainment of the Millennium Development Goals, but also protect the rights of girls as stipulated in the Convention on the Rights of the Child.

Speaking to affected couples during the home-visits, First Lady Dr. Kaseba urged the girls and boys to consider going back to school, and acquire skills to empower themselves economically. "Government will help you [young couples] to decide what support you need - but you should know that education is a priority as it will help you to have a brighter future. Various ministries will look into your needs and help you according to your needs", she said.

Dr. Kaseba, in her speech as guest of honor during the launch, highlighted that girls who are victims of child marriages are among those who are least educated, poorest, and living in rural areas. She added that this scourge hinders development and slows down the attainment of the Millennium Development Goals (MDGs). She highlighted that child marriages are influenced by cultural practices, which are highly respected and rooted in the African tradition, adding that if such trends continue, an estimated 453,000 young girls born between 2005 and 2010 would be married, or in union before the age of 18 years, by 2030.

UNICEF Zambia is supporting the national Situation Analysis (SiTAN) on child marriage, which will contribute to the mapping of organizations working on child marriage, and eventually towards the development of a detailed program document, which will bring about the national strategy on child marriage. UNICEF will also render technical support to the line ministry as they roll out the rest of the road map for the campaign.
Month 8
Saying NO to early marriage and early pregnancy

Week 2 – Safe sex

Lesson: How and when to say NO to unprotected sex

Introduction
As a girl or a boy, it is very important for you to know when to say NO to unprotected sex, as it is a right you have. It is about your life! Unprotected sex can transmit diseases like HIV/AIDS and other STIs – and this can cost you your life, or ruin the quality of your life. Unprotected sex can also make a girl pregnant. An early pregnancy can ruin your life too. Maybe you would have to stop your education. If you, as a girl, fell pregnant without being married, the boy might not want to stay with you, and maybe neither his, nor your own family will accept you. This is a very difficult situation, especially if you have not yet learned a skill that makes it possible for you to earn your own income. If you are a boy, it means you will have to take on the responsibility of being a father too early. Or, even if you are married, maybe your body is not yet ready, and your, and the new child’s life is in danger.

So, always remember, that you have a right to say no to unprotected sex, and learn what protection means. You also have a right to say no to sex, feeling too young and just wanting to wait for some years. This is where you need support. It can be tough to stand firm and say no. If you are a girl, it is likely that your boyfriend will not easily understand this. If you are a boy, you also have a right to say no, to get married too early or to be forced to have sex. Do not forget that it is your life and your future that is on stage.

When you decide it is time for sex, then it is important to know about it. Get support from other girls or boys, from your parents, or another person you trust. If you, at any time, are forced to have sex – it is important not to keep silent – but find somebody you can talk with, and who can help you with what to do, and to make it stop.

Instruction
1) The Club Leader introduces the topic about Safe Sex to club members.
2) You share your opinions and maybe your experiences with each other. You can sit in smaller groups of two Trios together and discuss:
What is my opinion about having sex as a teenager?
- Why is it important to say NO to sex or NO to unprotected sex?
- Have you ever said NO to sex or unprotected sex?
- Which arguments can you use, when you say NO?

3) In forum, you share the dangers of having pre marital-sex or unprotected sex.

4) You can perhaps, decide, that each of you find three other girls or boys who are not members in the club, and tell them about protected sex.

More knowledge
1. Safe sex
Taking simple steps to prevent getting or spreading HIV will pay dividends for you and for those you love. The only 100 percent effective way to prevent the spread of HIV through sex is to abstain — to not have sex of any kind. If you do have sex, practice safer sex methods. These are the steps you can take to help prevent HIV infection from sex:

- **Abstain from sex.** Not having vaginal, anal or oral sex is the surest way to avoid HIV. If you decide to have sex, you can reduce your risk of HIV by practicing safer sex.

- **Get tested.** Be sure you know yours and your partner’s HIV status before having sex.

- **Use condoms.** Use them correctly, every time you have sex. Using a male condom for all types of sex can greatly lower your risk of contracting HIV, during sex. If your partner does not want to use a male condom, you can use a female condom. Do not use a male and female condom at the same time. They do not work together and can break.

- **Talk with your partner.** Learn how to talk with your sexual partner about HIV and using condoms. It is up to you to make sure you are protected. Remember, it is your body!

- **Practice monogamy (be faithful to one partner).** Being in a sexual relationship with only one partner who is also faithful will protect both of you against HIV.

- **Male circumcision** is the removal of the foreskin or the extra skin that folds over and covers the head of the penis. In some tribes, this is a common practice. It has been proven to assist reducing the risk for HIV infection and is now recommended as a good method. Learn more from your health facility.

Follow the steps above for the correct use of a condom
• **Limit your number of sexual partners.** Your risk of getting HIV goes up with the number of partners you have. Condoms should be used for any sexual activity. They should also be used with any partner outside of a long-term, faithful sexual relationship.

• **Use protection for all kinds of sexual contact.** Remember that you do not only get HIV from penile-vaginal sex. Use a condom also during oral sex and during anal sex.

• **Using other birth control methods will only protect you from getting pregnant, but not from getting HIV.** Other methods of birth control, like birth control pills, shots, implants or diaphragms, will not protect you from HIV. If you use one of these, be sure to also use a male condom or dental dam correctly every time you have sex.

• **Get screened for STIs.** Having a Sexual Transmitted Infection, particularly genital herpes, increases your chances of becoming infected with HIV during sex. If your partner has an STI in addition to HIV, that also increases your risk of HIV infection. If you have an STI, you should also be tested for HIV.

• **Do not abuse alcohol or drugs, which are linked to sexual risk-taking.** Drinking too much alcohol or using drugs also puts you at risk of sexual assault and possible exposure to HIV.

**2. Family planning/ Birth control**

**Contraceptive** refers to methods used to prevent pregnancy. Examples are condoms, the (oral) pill and injections. These methods prevent pregnancy but do not protect against HIV.

**Family planning** includes two major ideas:

1. **Contraceptive use,** which involves the conscious prevention of unwanted pregnancy.

2. **Family planning services,** which provide information and services on contraceptives. This includes contraceptive options, procurement and distribution outlets, usage, limitations and advantages.
   - The primary objective of family planning services is to enable people to control their natural fertility process. This means, that it will help a couple to plan and control how often they get a new child.
   - Many family planning services also provide STI services.

**Family planning is important because:**

• It saves the lives of women and children and improves the quality of life for all.
• It allows women to avoid unwanted and poorly timed pregnancies.
• It saves children’s lives by allowing parents to delay and adequately space births.

**Benefits of family planning to different people**

<table>
<thead>
<tr>
<th>Benefits to children:</th>
<th>Benefits to adolescents:</th>
<th>Benefits to men:</th>
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<tbody>
<tr>
<td>• More food and other resources are available.</td>
<td>• Protection from early and unwanted pregnancies and childbirth, as well as unsafe abortion.</td>
<td>• Some methods of family planning can provide protection from STIs and HIV.</td>
</tr>
<tr>
<td>• Greater opportunity for emotional support from parents.</td>
<td>• Some methods of family planning can provide protection from STIs and HIV.</td>
<td>• They experience less emotional/economic strain.</td>
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<tr>
<td>• Greater opportunity to be educated.</td>
<td>• Ability to continue education.</td>
<td>• They are able to give greater care to each child.</td>
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<td>• Child mortality is reduced.</td>
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Benefits to women:

- Better health and protection from STIs.
- They are free to decide if and when to have children.
- They experience an improved quality of life.
- There are less maternal deaths.
- Improved communication between spouses and people outside their families.
- Some methods of family planning can provide protection from STIs and HIV.
- Less emotional/economic strain.
- They are able to give greater care to each child.

Benefits to the couple and/or family:

- Freedom to decide if and when to have children.
- Less emotional/financial strain.
- Increased education opportunities for the children.
- More energy for household activities.
- More energy for personal development and community activities.

Benefits to the community:

- Reduced demand for environmental resources (land, food, water).
- Reduced demand for community resources (health care, education).
- Greater participation by individuals in community affairs.
- The rate of STIs and HIV infection (which cause deaths in the community) can be reduced.
- Reduced emotional/economic strain.

3. Types of contraceptives

Non Scientific Methods

Non scientific methods are based on the traditional beliefs and practices of a group of people. These include use of charms, use of rings, use of amulets, use of waistbands, and use of ritual recitations. These methods are not effective and will not protect against pregnancy.

Traditional Methods

Periodic abstinence: This natural family planning method works by being aware of the woman’s menstrual cycle and therefore knowing when sex is unlikely to result in a pregnancy. Natural family planning is often unsuccessful in preventing pregnancies, because it is difficult to predict the right time of the month when a woman will not get pregnant. In addition, this method does not offer any protection from STIs or HIV.

Withdrawal: is when the man withdraws his penis from the vagina before ejaculation. This method is not recommended to youth, as it is very difficult to control.

Abstinence: is when you do not have any sex. This is the surest option for preventing pregnancies, STIs and HIV.

Modern Scientific Methods

Modern scientific methods are methods that have been proven to be effective. These include:

Hormonal Contraceptives: This is a method that works primarily by interfering with chemicals that stimulate ovulation. Examples include:
- Oral contraceptives (pills): Pills need to be taken on a daily basis.
- Injectables: Injections can last up to three months.
- Skin implants – Norplant.

Barrier Methods: These are methods that prevent pregnancy by obstructing the man’s sperm from getting in contact with the woman’s egg. Examples are male condom, female condom and diaphragm (cervical cup used by the woman).
**Dual Protection:** Condoms will not only provide protection against sexually transmitted infections, including HIV, but prevent pregnancy as well. Condoms are very important because of dual protection.

**Spermicides:** Contain chemicals, which kill sperms and prevent conception (pregnancy). Spermicides may be in form of tablet or foam. They are inserted into the vagina shortly before intercourse.

**Intrauterine Devices (IUDs):** are a small plastic device that fits inside the uterus (womb) to prevent pregnancy. It is also known as “the loop”. With IUDs, the conducive environment required for fertilization is denied.

**Permanent Methods:** These are also called sterilization. In sterilization, a cut is made across the tubes that transport sperm and eggs to prevent fertilization. For women this is called bilateral tubal ligation, while in men it is called vasectomy. It is a small operation, but when done, it cannot be changed.

4. **Emergency contraception**

**Emergency contraception** (also called post-coital contraception) is a form of birth control that may be used by women who have had unprotected sex or used a contraceptive method that failed.

- It is used to prevent a pregnancy and does **not** protect against STIs and HIV.
- **Not** a regular method of birth control.
- It is **not** a form of abortion.

**Some sources of Family Planning Services include:**

- Government hospitals / Mission hospitals / Private hospitals / Clinics.
- Pharmacies / Chemists / Drugstores.
- Community Based Distributors (community members who are trained to provide some modern contraceptives).

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Female sterilization is called a **Tubal Ligation**

Male sterilization is called a **Vasectomy**
Month 8
Saying NO to early marriage and early pregnancy

Week 3 – Pregnancy and birth

Lesson: What happens during pregnancy and birth

Introduction
Every pregnant woman needs good health, good food, and the love and support of her family and community. Most women who are healthy during pregnancy do not have difficult births. Most of their babies are born healthy. At the same time, pregnancy can be one of the main dangers a woman faces in her life, and some women may die from problems during pregnancy and birth. Still, a majority of women does not get proper care during pregnancy or trained help during birth. They usually have their babies at home with the help of a local midwife, or a family member.

In the time close to giving birth, a woman’s body is changing and focusing all its energy to make the changes necessary for the labor to start. The woman should continue to eat well, and take many small meals and drink whenever she is thirsty. She should be allowed to take rest whenever she needs it.

During labor, which can last up to 24 hours, or sometimes more, the woman needs all her strength to deliver the baby. There must be enough food and water in the house, a midwife, or a woman with experiences must be brought to the house to help with the birth, some other women must take care of the other children, so that the woman can concentrate and feel safe during labor.

The first 6 weeks after birth is the most important time for a woman to feel strong and healthy again. During this time, she needs lot of healthy foods and plenty of rest. Others in the family must help and do some of her usual work, like fetching water and firewood, preparing meals, cleaning and taking care of the other children.

Going through the 9 months of pregnancy and childbirth is quite an ordeal for a woman’s body and mind. That is why the women’s body has to stay strong and healthy during pregnancy, to be ready to give birth, to recover after the baby is born, and to produce enough milk to breastfeed the baby. She also needs to be strong and healthy to be able to breastfeed the child during the first two years of its life.
Instruction

1) In this lesson, you read together about childbirth, and what happens with a woman’s body during birth, and in the weeks thereafter. It could be a good idea to invite a woman or two who have already given birth to participate in this lesson.

2) In your Trio, prepare questions for a mother with smaller children, and ask her to tell you how she experienced labor and the time after it; how she was prepared; what problems she faced; and everything else you want to know from someone who has experienced childbirth.

3) You have an interview with a new mother and learn from her experiences, either during the lesson or afterwards.

More knowledge

Pregnancy

How do you know if you are pregnant?
• You do not have menstruation.
• Your breasts become bigger and sore.
• You might feel sick and vomit.
• You need to urinate more often.
• You feel tired.

How do you know when the baby is due?
Add 9 months plus 7 days to the date, when your last normal monthly bleeding began. Your baby will probably be born any time in the 2 weeks before or after this date.

What happens in my body just before labor begins?
Your body prepares for childbirth throughout your pregnancy, but in the last few weeks, it does some final preparations:
Hormones start working to soften the ligaments between the bones in your pelvis, which gives your pelvis additional room for the birth. During this time, you might feel a shift in your sense of balance, your joints might feel looser, and you might feel sore and achy.
Other hormones begin to soften your cervix, which is the neck of the uterus. Throughout most of the pregnancy, your cervix is closed, holding the baby inside your uterus. Much of the work of labor is caused by opening the cervix for the passage of your baby. However, your cervix may begin to soften, becoming thin and opening even before labor begins.
Your baby may begin moving lower down in the pelvis. You will notice this by feeling increasing pressure in your lower abdomen, and that breathing has become easier. You look different, because your baby has “dropped.” For first time mothers, this may take place up to a few weeks before the birth. For women who have already given birth, it may not occur until after labor begins.

You may experience the passage of stringy, perhaps blood-tinged mucous. This "mucous plug" has been in place inside the cervix during your pregnancy, and as the cervix begins to soften and open, the mucous loosens and begins to pass from the vagina. Some women may experience this increased mucous passage for a few days (or even weeks) before labor begins, others may not notice it at all.

The breaking of the bag of waters (ruptured membrane) may also occur before labor begins. For most women, contractions will follow within a day. (You should notify your midwife or doctor, when you think your water has broken.)

**Giving birth**

There are three stages of giving birth (labor):

- **First stage**: dilation. You have contractions to open your cervix. This stage can last between 7 and 20 hours, or more if it is the first birth. In later births, it usually lasts 7 to 10 hours.
- **Second stage**: pushing. This is the active labor. You have contractions that bring your baby down into the vagina and out into the world. You assist this process by pushing. It often lasts 2 hours.
- **Third stage**: placenta. You continue to have contractions to free the attachment of the placenta, and you push the placenta out. The placenta is delivered within a few minutes after the child, but delays of up to thirty minutes are considered normal. If the separation is delayed, breastfeeding the baby, or stimulating your nipples may help.
When the placenta has been delivered, it is important to examine it thoroughly. If it is not “whole”, some part of it might be left inside the womb, which can cause severe bleeding.

Straight after birth - meeting your baby
As soon as your baby is born, it needs to be close to you. It is a good idea to place the baby close to you as soon as she has emerged, and even before the cord is cut, so that she can feel skin contact and closeness straight away.
The cord is clamped and cut, the baby is dried to prevent her from getting cold and you will be able to hold and cuddle her. She may be quite messy, with some of your blood and perhaps some of the vernix (white substance that covers and protects the skin of a fetus) on her skin.
Mucus sometimes has to be cleared out of a baby’s nose and mouth. Some babies need additional help to establish breathing.
Your baby will like to be close to you just after the birth. She should be examined by a midwife, or the woman who helps you through labor, and then be weighed and measured.

Caring for the new mother
A mother needs care after birth, just as the baby does. People are often so busy looking after the baby, that the mother’s needs may be forgotten.
• To prevent infection the mother should not have sex, or put anything in her vagina until her bleeding stops.
• She should get a lot of rest for at least 6 weeks.
• She should try to stay clean. It is good for her to wash and to keep her genitals very clean.
• While bathing, do not sit in water until 1 week after the birth.
• A new mother needs to eat more food than usual. She can eat any kind of food: fish, meat, beans, grains, vegetables, and fruit; all will help her heal from the birth, and enable her to have the energy to be a good mother.
• She should drink plenty of fluids.
• If she is breastfeeding her baby and giving no other milk to the child, the breastfeeding can protect her from falling pregnant again too soon.
• If she has a tear at the opening of her vagina, she should keep it clean. She can apply a hot, damp cloth and honey to the tear to help it feel better, and to heal more quickly. If the tear causes burning, she can pour water over her genitals while she passes urine.
• Any plant medicines used to help her genitals heal should be clean (boiled is best). Do not put plant medicines inside the vagina.
• She should start a family planning method soon, especially after 6 months, when she starts to feed her baby something other than breast milk. It will be better for her health, if she starts using a family planning method before having sex again, instead of becoming pregnant too soon.
Why breastfeeding is best.
Breastfeeding is the natural way to feed newborn children and the healthiest practice in the world. As the world changes, women sometimes need information and support to keep breastfeeding their babies.

Breastfeeding is important because:

- Breast milk is the only perfect food to help a baby grow healthy and strong.
- Breastfeeding helps the womb stop bleeding after birth.
- Breast milk protects the baby against illnesses and infections like diabetes, cancer, diarrhea, and pneumonia. The mother’s defenses against illness are passed on to the baby through her milk.
- Breastfeeding helps protect the mother against diseases like cancer and weak or brittle bones (osteoporosis).
- When a woman breastfeeds her baby, the milk is always clean, always ready, and always the right temperature.
- Breastfeeding helps the mother and baby to feel close and secure.
- For some women, giving their babies nothing but breast milk can help protect them from becoming pregnant again too soon.
- Breastfeeding is free.

When should the baby begin to eat other foods?
A baby is ready for other foods when:

- She is about six months old, or older. (But you should continue breastfeeding as well, preferably until she is 2 years old).
- She starts to grab food from the family or from the table.
- She does not push food out with her tongue.
- Between 6 months and 1 year, give breast milk whenever the baby wants it. Even if she is eating other foods, she still needs as much breast milk as before. After breastfeeding, give other foods 2 or 3 times a day. Begin with a soft, mild food, like cereal or porridge. Some women mix these with breast milk. You do not need expensive baby cereals.

Women’s health is a community issue
Month 8
Saying NO to early marriage and early pregnancy

Week 4 – Using drama and song to share an important message

Action: Compose a drama that encourages girls to continue their education in secondary school and share it with the whole school.

Introduction
You have learnt about HIV/AIDS and the dangers of early marriage and pregnancy. Now, that you are aware of more details surrounding these two issues, you are able to share the knowledge with others at the school. You have also discussed how being able to finalize secondary education improves a girl’s possibilities in life.
Use drama, songs, dance and poems to express your thoughts in a way that touches the heart of the people who listen to you.

You can use the stories from the course to build your drama around. You can use experiences from other people you know. You can even try to imagine yourself in a situation of having attracted HIV or in a situation where you were to become parents. You would have to tell your own parents, probably leave school and have to cope with many other challenges you had never expected to be confronted with. You could add examples of how an educated girl has a better chance for supporting her family and her children later in life, economically as well as with knowledge that can help the children to become knowledgeable as well.

Maybe you choose to make one long story, or maybe you decide to make a row of short skits to show many sides of the issues.

Instruction
1. Start with a brainstorming session on the content of the play. Write all your ideas on the blackboard.
2. Discuss the proposals and decide which to use.
3. Make a script consisting of the headline for each scene, a line of what it should tell, and a list of characters who should participate.
4. Divide yourself on playing the characters, setting up the scene, writing songs etc.
5. Practice to perform the play or plays.
6. Agree with the headmaster where and when to perform the play.
7. Invite the other classes to the event.
8. If your school does not have primary school classes, you could decide also to show the play to the students in class 6 and 7 in nearby primary schools.
Month 9
Man and woman as equal partners

Week 1 – Men and women, differences and similarities
Course: The history of men and women – the influence of gender

Both men and women are human beings. Science has proven that there are similarities between the male and the female hominid brains. In that sense, we are alike, as we are of the same species. No matter gender, color or beliefs, we are humans.

Biologically, there is a small difference, and biology has been a part of shaping the way men and women have co-operated since prehistoric times. For the human species, there has been a tremendous gain in that co-operation, and as you can see, we as a species, have multiplied to live all over the globe today, having reached more than 7 billion.

Since the woman biologically is the childbearing and nurturing entity, the woman has developed a set of emotions and skills, which circles around the responsibility and caring of the offspring. Whereas, the man has had the task of protecting the women and the offspring, keeping them safe, feeding and keeping them warm, the man has developed his set of emotions and skills to fulfill this task. This is how humans have lived since time began, and since the first humans saw the light of the day. The division of labor has shaped the co-operation between male and female, and has been useful in securing the next generation.

It is without doubt, that it is the women who have paid the highest price for that co-operation. The way it has been executed, has created inequality among men and women.

It especially took off when the hunter and gatherer society changed into becoming an agricultural society, which used cultivation by plowing as the means of production. These more heavy tasks required upper-body strength to control the plow. Consequently, it gave men an advantage over women, and led to a more prominent division of labor. This marginalized the women. As the agricultural society produced more food for consumption than any time before in history, this gave rise to a culture, which confided the women to being in the home. Women gave birth to more children than before. As a result, women
became subservient to men. The man started to look at the woman as his property. Laws, and also religion, in many cases supported that way of looking at it. Thus, it has followed us into today’s world, and can especially be seen practiced in rural communities, in countries all over the world.

Today, the biological differences remain in the way, that it is still the women, who give birth to the next generation. But, in general, society, science, education and the way we are living, has at many levels equalized men and women. This has developed faster during the last half of the century, especially in the so-called “developed world”. Both modern technology and social economic organizations of modern societies has brought a restructuring of the social roles, and the cultural values concerning the relationship between men and women.

Men and women today have an opportunity to achieve equal power and respect.

**Instruction**

1. The teacher gives the lesson, using the introduction and the “More knowledge” material.
2. In Trios, discuss and try to understand some of the findings in the history of men and women. Why did it develop and become like that?
3. Continue in the Trios to discuss the influence of gender. How is it in the villages where you live, and how it is in the urban way of life? Where are the differences?

**More Knowledge**

*Relations between males and females. Looking back at our roots.*

**Two hundred thousand years ago** – The first humans appeared in Africa. They lived as small bands of hunter-gatherer tribes consisting of 10-50 people. While men tended to do more of the hunting, and women more of the gathering, both sexes were equally indispensable to the survival of each community. It is suspected by many anthropologists, that these were egalitarian communities where men and women were treated quite fairly, and various forms of promiscuity and polygamy were not only accepted, but sometimes also encouraged.

**Over thousands of years**, humans fanned out across the planet, and these sexual morals would change and adapt to the environmental surroundings. In more dangerous environments with scarce resources, the male strength and size would become disproportionately more valuable, and societies would become more patriarchal, granting more polygamous rights to men, but not to women.

In safer environments with abundant resources, the man’s size and strength would become less economical necessary, and these societies would provide more equal rights between men and women.
Over these millennia, the biological bases of gender and sexual behavior evolved. A lot has been made of it. It seems clear that there are slight and significant psychological differences between men and women, but which differences, and how significant they are, is still up for major debates.

It is, however, pretty conclusive that there are major differences between men and women in two areas: physical aggression and sexual arousal. Men are more physically aggressive, more physically energetic and more tactile. Men also have more consistent, but less flexible sexual habits. They are more aroused through visual stimulation. Women are less physically aggressive and have better verbal skills. They have less consistent, but more varied sexual habits. They are more aroused through psychological stimulation.

One hundred and fifty thousand years ago – Spoken language developed. Men and women can finally communicate their thoughts and desires to one another.

Forty Thousand Years Ago – Humans began to paint, sculpt and make art.

7,000 BC – Agriculture is discovered. For the first time in human history, humans are able to accumulate surplus of food and resources, far beyond the need of one person’s consumption. This means, that people can engage other people or keep slaves to produce the food they need. People, who are good at farming or have the best land, gain a huge economic advantage over the rest of the population. Socio-economic inequality emerges. Class systems begin to take hold. Humanity will never be the same.

5,000 BC – Agriculture slowly marginalizes women in society. The best farmers are required to work with heavy tools and large animals, for long periods of time. Men have a major advantage in farming due to their greater size and strength. Pregnant women cannot work at all. The women's economic contribution to a functioning society plummets, and as a result they become subservient to the men they are together with. By this time, women had no legal rights. They were basically treated as the property of their fathers or husbands.

2,000 BC – The earliest cities emerge in Mesopotamia and northern Africa, and later on in India and China. City/states usher in thousands of years of imperial conquests, beginning with the Sumerians and stretching all the way through the Romans and Mongols, to the British Empire almost four thousand years later.

Marriage is now the primary unit of economic organization in the city/state systems. As men struggle to accumulate land, resources and power, they need to guarantee paternity of their children, so that they may pass their wealth on to their own kin (subsistence hunter-gatherer societies seemed to lack this preoccupation). As a result, female chastity and submissiveness becomes necessary in women to appeal to powerful men. Female sexuality is objectified and fertility is a woman’s highest economically viable option for social improvement.

As a result, women are, quite literally, traded on the open market between a woman’s family and the eligible bachelors of a similar or higher social standing. More powerful men even take on multiple women as wives, or create harems for themselves. Divorces and remarriages become common as men shuffle between families, looking for the best option to move ahead. Meanwhile, families vie to marry off their girls to create political alliances, and gain
access to more resources and wealth. There is very little romance involved. Sex is a duty more than a pleasure. Women possess few personal rights and are entirely dependent on the men in their families for their needs. Often, girls were married to husbands who were old and cruel. This practice of social arrangement has continued for most of the remaining period, and it persists in many parts of the world today.

Our time, however, see the education of girls change the rules of the old society. Since the 1950es, it has become common in many countries for girls to pass graduation, or at least class 10. Many women are now educated and working in all kind of professions, from engineers to scientists to generals. With woman being able to generate their own income, they no longer depend on a man for their living. In some western countries, this combined with legislation that give woman more rights, has led to a decrease in the number of marriages, as both men and woman choose not to enter into marriage, and an increase in divorces, as both sexes put higher demands to the quality of the live they want to live. It has also led to some 40 % of children in the 28 EU countries being born outside marriage in 2012.

This situation creates other problems, especially for children who often have to pendle between the homes of their parents.
Week 2 – In-equality for girls and boys today in our country

Lesson: Who decides the roles for girls and boys, women and men?

Gender in-equality today is larger in poor countries. This also counts for Zambia. Here, cultural norms favor males, in education, health, personal autonomy and more.
Firstly, more boys than girls attend school; this discrepancy becomes even bigger after primary school level. Where resources are limited or due to customs, parents prefer to invest in the boys’ educations, and not the girls’. Common saying states: “Raising a daughter is like watering your neighbor’s field”.

Women are still protesting because of severe under representation in the countries labor force and because of unequal pay for the same work. Many women are now taking care of cultivating the families’ land, but they often do not have a say in what to grow and how to use the money they earn. Gender based violence at home is more often the order of the day, than not, for many women, and the communities’ tolerance of these practices tend to be high.
In-equality between men and women is still high on who has the decision-making power in the family.
These facts have implications regarding the possibilities in the life of the female children and the women.
Try to consider the answer to the following question: As a girl or woman how much freedom of choice and control over the way your life turns out, do you have?

In the rural area, economic developments are scarce, electricity, piped water, viable roads and communication are not commonly available, and the women and the girls often have to spend their time doing their daily chores to sustain the families’ needs, instead of going to school, or producing products that can generate an income, and bring on development. Without technological improvements in the production, the women’s time will remain tied up at home: fetching water, firewood, cooking, washing, cleaning, doing the farm work, and tending to the children and the animals. The hours of a productive day will not be extended, because there is no electricity in the home. When
technological development reaches the rural areas, this will reduce the time needed for household chores. Just imagine getting light by pressing a bottom, and getting running water from a tap in the kitchen.

Women’s health is also compromised as childbearing is more dangerous in poor countries, and a weak health system increases complications in connection with being pregnant. A patrilineal system is the norm. Here names, property and wealth are passed on to the next generation through the male descendants, and nothing goes to the female. This system puts the sons on a higher footing than the daughters, and is affecting the gender gap. Some legal reforms are needed in many countries to allow sons and daughters to inherit equally.

To promote equality for girls and women, there is a dire need to change some of the existing cultural practices. Here are some few examples:

- Early marriages must be stopped.
- Gender based violence must be stopped.
- Women must be promoted to become equal partners of decision-making in the family.
- Family planning and child spacing must be promoted, to prevent too many and too frequent pregnancies.
- The family should invest in the girl and send her to school to get an education.

You can start to discuss where you think changes are needed to give girls and women a better change in life.

**Instruction**

1. The Youth Club leader presents the lesson.

2. In Trios, discuss the following questions:
   - Why are girls and boys treated differently, and where does this become a problem for the girl as a child, and later as a woman.
   - Identify how different types of work are traditionally divided between men and women, and boys and girls in the families.
   - Describe how gender roles shape individual behavior, and the ways in which society penalizes those who do not conform to the norms.

3. Together the Youth Club discusses all the findings of the Trios, and what each of you thinks about it.


**More knowledge**

"Sex" refers to physical or physiological differences between males, females, and intersex persons, including both their primary and secondary sex characteristics. "Gender," on the other hand, refers to social or cultural distinctions associated with a given sex. When babies are born, they are assigned a gender based on their biological sex—male babies are assigned as boys, female babies are assigned as girls, and inter-sex babies are usually relegated into one category or another. Scholars generally regard gender as a *social construct*, meaning that it does not exist naturally, but is instead a concept that is created by cultural and societal norms.

From birth, children are socialized to conform to certain gender roles based on their biological sex, and the gender to which they are assigned. As we grow, we learn how to behave from those around us. In this socialization process, children are introduced to certain roles that are typically linked to their biological sex. The term "gender role" refers to society's concept of how men and women are expected to act, and behave. Gender roles are based on norms, or standards, created by society. In many cultures, masculine roles have traditionally been associated with strength, aggression, and dominance, while feminine roles have traditionally been associated with passivity, nurturing, and subordination.

The socialization process, in which children learn these gender roles, begins at birth. Today, our urban society is quick to outfit male infants in blue and girls in pink, even applying these color-coded gender labels while a baby is in the womb. It is interesting to note that these color associations with gender have not always been what they are today. Up until the beginning of the 20th century, pink was actually more associated with boys, while blue was more associated with girls—take this as an illustration of how socially constructed these associations really are.

Gender socialization occurs through four major agents: *family, education, peer groups,* and *mass media*. Each agent reinforces gender roles by creating and maintaining normative expectations for gender-specific behavior. Exposure also occurs through secondary agents, such as religion and the workplace. Repeated exposure to these agents over time, leads people into a false sense that they are acting naturally based on their gender, rather than following a socially constructed role.

Children learn at a young age that there are distinct expectations for them, based on their assigned gender. Cross-cultural studies reveal that children are aware of gender roles by age two or three; at four or five, most children are firmly entrenched in culturally appropriate gender roles. Parents often inspire the boy to "boy" types of chores, which promote motor skills, aggression, and solitary play, looking after the herd of animal and the like. The girl child is always given household chores, fetching water, firewood, cooking, cleaning, looking after their younger siblings, etc. All tasks that are time consuming and foster nurturing, and social proximity. Studies have shown, that children will most likely choose to play with "gender appropriate" toys, even when cross-gender toys are available, because parents give children positive feedback for gender-normative behavior.

The drive to adhere to masculine and feminine gender roles continues later in life, in cases where both male and female work outside the home of the family. Men tend to outnumber
women in professions such as law enforcement, the military, and politics; women tend to
outnumber men in care-related occupations such as childcare, health care, and social work.
These occupational roles are examples of typical male and female behavior, derived not from
biology or genetics, but from our culture's traditions.

The attitudes and expectations surrounding gender roles are not typically based on any
inherent or natural gender differences, but on gender stereotypes, or oversimplified notions
about the attitudes, traits, and behavior patterns of males and females. Gender stereotypes
form the basis of sexism, or the prejudiced beliefs that values males over females. Common
forms of sexism in modern society include gender-role expectations, such as expecting
women to be the caretakers of the household. Sexism also includes people’s expectations of
how members of a gender group should behave. For example, women are expected to be
friendly, passive, and nurturing; when a woman behaves in an unfriendly or assertive manner,
she may be disliked or perceived as aggressive, because she has violated a gender role. In
contrast, a man behaving in a similarly unfriendly or assertive way, might be perceived as
strong or even gain respect in some circumstances.
Sexism can exist on a societal level such as in hiring, employment opportunities and
education. In some of the richer countries, women are less likely to be hired, or promoted in
male-dominated professions such as engineering, aviation, and construction. In many areas of
the world, young girls are not given the same access as boys, to nutrition, health care, and
education.
Month 9
Men and woman as equal partners

Week 3 – I am the master of my life, not alcohol or drug abuse

Lesson: Decide what you actually want and how to influence your choices in life.

As a teenager, you are saying good-bye to your childhood life. At this stage, you have either just joined the life of being a youth, or you are well into your youth, or you are looking forward to becoming an adult. There is physical and developmental growth taking place in you.

Part of these changes is the eagerness you feel to experiment with doing new things that are available to you. You are no longer spending most of your time with your family, but you find yourself spending a large amount of your time with your peers. You start experiencing pressure from your peers and society in general. You feel like experimenting with everything you see adults doing, and want a feel for it.

It is at this stage that YOU NEED TO BE CAREFUL. You need to become independent and behave the way YOU think is the right way. Do you dare to do that? Or, do you bend to peer pressure?

You need to be very careful, because the consequences of your actions can determine how you start your adulthood. Peer pressure, poor judgment, lack of life experiences, all play a role in making you not being able to fully understand the consequences. Or maybe you think that it will just not go wrong for you?

At your age, you are capable of becoming a parent of a child. You might be asked to try this or that drug. You are maybe old enough to buy beer or other kinds of alcohol and get drunk. You have started smoking. It is a good idea to question yourself on why you are doing it.

You can very easily develop habits that are difficult to get rid of. Some can cause serious consequences later in your life, as you may continue these into adulthood, and therefore run the risk of contracting a deadly disease, or an addiction.

Instruction
1. The Youth Club leader presents the lesson, following the introduction and the information from “More knowledge”.

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2. In trios, make a list of risky behaviors that are common in your area. Discuss what caused them, and how to stay free of them.

3. Discuss what kind of social life you would like to have in order to enjoy your youth without being trapped to do things, you actually do not like, and you know can harm you.

A list of interesting issues you can discuss in the Youth Club:
1. We are against abuse of drugs.
2. We are against alcohol.
3. We say ‘No’ to sexual abuse of girls and boys.
4. No to prostitution.
5. How can we do something ourselves for our own sustainability?
6. Out with crime – In with a good future.
7. How should we use our lives?
8. What kind of friends should we have?
9. What does global warming mean for us?
10. No right to use bullying tactics.
11. How domestic violence affects everyone in the family.
13. ‘I was born HIV positive’ – About stigma.
14. Drop in…to school – and not out of school.
15. We say ‘No’ to teenage pregnancy.
16. Let’s build up our clean locations.
17. We are aware of human trafficking.
18. Is it really all about the trend in fashion? Who benefits?
19. ‘Inch by inch, row by row – Going to let the garden grow’.
20. Working with people in the community.
21. I don’t like junk food any more.
22. Pollution – Take an action to stop it.
23. Latest news from the world – It is affecting us.
25. Don’t fall sick – Do your part.
26. All of us are one – ‘No’ to tribalism.
27. Looking at us here today – What does ‘freedom’ actually mean to us, the youth of today?
**More Knowledge**

**A drug** is any chemical you take that affects the way your body works.

- Alcohol, aspirin, marihuana, Kodin and nicotine are all examples of drugs.
- Drugs and alcohol are potentially damaging to a person’s physical, social and mental health.
- Drugs should **only** be taken as advised by a medical practitioner, and alcohol intake should be limited to safe levels.
- **Alcohol** is among the most widely used **recreational stuffs**. Alcohol is the most common mood-altering drug in Zambia.

**Types of drugs:**

- **Depressant** refers to any drug or chemical that decreases the activity of any bodily function. The term most often is used to refer to drugs that reduce the activity of the central nervous system. The sedative effects of these agents tend to reduce pain, relieve anxiety, and induce sleep. They include alcohol and tranquillizers.

- **Stimulant** refers to a group of drugs that excite the central nervous system, increase alertness, and alleviate fatigue. Caffeine is perhaps the most socially acceptable and commonly used stimulant. Other stimulants include cocaine and amphetamines, which create intense feelings of joy (well-being). Amphetamines, commonly known as pep pills or diet pills, also decrease appetite.

- **Hallucinogens** refer to drugs that change a person's perception in reality. People using these drugs often see images, hear things, or feel sensations that are not there. Marijuana and heroin are two examples.

**Legal drugs and illegal drugs**

- Legal drugs are those that have been approved for sale either by prescription or in shops. If used improperly, people can become physically dependent on some prescription drugs, such as morphine and valium.

- Illegal drugs are drugs, which people may not manufacture, sale, purchase for sale, or possess. These include drugs such as Marijuana (dagga), Cocaine, and Heroin.

**Which drugs are commonly used in Zambia?**

- Drugs commonly used in Zambia include alcohol, medicines like Kodin, tobacco, and dagga (also known as marijuana or cannabis). Cocaine and heroin use exists, but by a much smaller group of people.

- A combination of Kodin and alcohol is often used to get drunk faster.

- Home brewed beer and alcohol is commonly used because it is cheaper than approved brands. The major risk of drinking home brew is that you do not know exactly how much alcohol it contains. Another risk is the presence of methanol (wood alcohol), an optic nerve poison, which can be present in small amounts when fermenting grains or fruits high in pectin.

- Alcohol poisoning and even blindness or death can result from drinking seriously strong homemade alcohol.
• Glue sniffing is common among urban street children and vulnerable youths. Some types of glue produce dangerous gases such as acetone, which when inhaled can make a person feel excited, or feel a mild euphoria, but can also result in disorientation and coma.

Every day young people use drugs, alcohol and other mind-altering substances that damage their health and compromise their well-being. Most often, they do it without understanding the consequences.

**Reasons for people to use drugs or alcohol**

- Bending to peer pressure
- Wanting to hold onto a relationship
- Because they are bored, lonely or angry
- To fit in
- To satisfy curiosity
- They like the taste or the feeling
- Trying to forget problems or reality
- Because their families use them

**Why you should not let yourself become addicted to use drugs or alcohol**

- It is against most religious beliefs
- You should not allow your life to be governed by addiction to drugs
- Using drugs do not solve problems
- It is better to work out real solutions
- Addiction to drugs costs a lot of money
- You should not break the law
- You risk to lose control of your temper and of what you are doing, which can lead you into dangerous situations

**Drug abuse or substance abuse refers to:**

- Regular use of illegal drugs.
- Misuse of drugs developed for a medical purpose.
- Consumption of drugs by people who are addicted to them.
- Using drugs for a different purpose than that for which they were designed.

Even medicines can harm, if used excessively or improperly. When we are sick, medicinal drugs may be given in prescribed doses to cure our illness. A drug like Coartem, for example, would be quite helpful in treating malaria. If however, someone deliberately used high doses of malaria medicines for other purposes that would be regarded as an abuse of that drug. When an individual consumes alcohol in excess and has difficulty functioning without alcohol, that person is alcoholic.

**Some people become addicted to drugs.**

Addiction occurs when the normal functions of the body are altered in such a way that the body requires the continued presence of the drug to function.

- Addiction can be psychological or physical, depending on the drug. The person who is addicted cannot function normally without the drugs of addiction.

- Many people cannot function without the stimulant of nicotine from cigarettes, or without alcohol. Some cannot socialize without alcohol or dagga. Without the drugs, the addict feels poorly, is anxious and restless and may even neglect him or herself.
If you drink a lot of alcohol for a longer period, it can seriously damage your body and mind.

- Alcohol acts as a depressant on the body. It slows our reflexes, constricts blood vessels and influences the way we see and interpret events around us.
- Drinking too much can make men impotent (they can’t keep an erection).
- For a pregnant woman, drinking can damage her unborn child.
- Health problems associated with alcoholism include permanent loss of memory, liver and heart damage —black-outs and shaky balance.
- Alcoholics/druggists have frequent mood swings, and may have outbursts of violence or depression while drinking.

Young people’s normal growth and development is often stopped.

- Drug abuse and addictive behavior interferes with the establishment of healthy relationships.
- Drug use damage judgment in critical situations.
- Accidents, missed opportunities, unintended pregnancies and academic failures are more likely when you cannot think straight.
- Drug addiction and alcoholism also diverts needed financial resources from more constructive use of the money.

What can prevent drug and alcohol abuse?

- Knowledge
- A healthy self-image
- A strong system of values
- Assertiveness
- Healthy activities

When you are under the influence of a drug, you can make unsafe sexual choices and put yourself at risk of STIs and HIV infections, or of transmitting the diseases and the virus to others.

- Alcohol consumption is considered a risk factor for STI and HIV infection. This is especially true if a person abuses alcohol or drugs.
- Alcohol consumption damages judgment and reasonable thinking.
- Those who intend to use condoms may lose their resolve after drinking alcohol. Condom negotiation with a partner who is drunk is very difficult.
- Alcohol is also related to gender-based violence.

People who are addicted to alcohol and drugs need help to stop the abuse. There are many organizations offering help, like Alcohol Anonymous or SHARPZ (Serenity Harm Reduction Programme Zambia). Anyone with an alcohol or drug problem who wishes to overcome it should seek help from these organizations. It is, however, a problem for most addicts that they do not acknowledge that they are addicted, and do not understand the seriousness for their life and wellbeing.
Week 4: Sharing what is on our minds

Action: Making a theater play about the dangers of drug and alcohol abuse

Introduction
You have had lessons about the challenges for youth to reach adulthood without being trapped in the snares that are tempting youth in modern day life. You have had discussions among yourself to make up your minds on how to deal with them.

In this action, you will share your concerns with your peers. Talking about these issues will help you and your friends to be better prepared, when you have to face them.

It all starts with an innocent curiosity to test new things, which by some forces are presented as “being in”, or something you just do to “show off”, to be in the company of the tough guys. Unfortunately, these are most often promoted by the people who will earn from getting you addicted. This goes for cigarettes, alcohol, marijuana, and the more dangerous drugs. When they first get you started, you are the one who becomes addicted, and this will cost you a lot of money throughout your life. Even just smoking cigarettes, which is totally legal to do, although all packets need to have warnings printed on them. Here from USA:

The Comprehensive Smoking Education Act of 1984 amended the Cigarette Labeling and Advertising Act by requiring cigarette manufacturers and importers to display on a quarterly rotating basis the following four health warnings on all cigarette packages:

**SURGEON GENERAL’S WARNING:**
Quitting Smoking Now Greatly Reduces Serious Risks to Your Health
Smoking Causes Lung Cancer, Heart Diseases, Emphysema, And May Complicate Pregnancy
Smoking by Pregnant Women May Result in Fetal Injury, Premature Birth, And Low Birth Weight
Cigarette Smoke Contains Carbon Monoxide

This type of compromise express clearly the type of double standards companies can get away with, when they are big enough.
Instruction
1. Discuss in the Youth Club and decide which issues you want to share with your friends.
2. Develop a short skit on each of the issues. Use humor and other ways to keep the engagement of the audience.
3. Practice to perform the skits.
4. Decide on the date and the venue. Agree with your teacher and the headmaster.
5. Invite people to come and watch the drama and learn new things.
6. Perform in front of many students at the school. Maybe you can also use your drama at other events.
Week 1 – Cultural and common practices – good and bad ones

Lesson: Looking at our cultural practices and discussing their benefits

In Zambia, as in other parts of the world, there are many common practices. Some have cultural and traditional backgrounds others have over the years been accepted as normal behavior and labeled traditional. Some of these traditions are good, in that they tend to guide people to maintain law and order and positive social behavior in the communities. But, some of these traditions also happen to be bad and oppressive.

Some cultural practices are progressive. Others are harmful, especially to women and girls, and they encourage abuse. These practices place women in inferior positions with respect to property, inheritance, marriage and decision-making. In many cases, culture is used as an excuse to continue various forms of abuse that causes sexual, physical and psychological harm.

In Zambia, it has been a custom for girls to be married at an early age. This can be harmful for a girl's physical and psychological development. Other cultural practices, such as wife inheritance and sexual cleansing, in which a newly widowed woman must have sex with one of her husband's male relatives in order to "exorcise" his spirit increase the risk of contracting HIV and deprive women and girls of their rights. Women are also referred to traditional counselors to be disciplined at the request of their husbands, where they are subjected to physical and psychological abuse.

Present Government policies discourage the continuation of harmful cultural practices. Some traditional leaders are also speaking out against these and have taken steps to discourage them. For example, Chief Mpezeni from the Eastern Province has abolished sexual cleansing and Chief Liteta (Central Province) has banned early marriages. Unfortunately, others continue to ignore these practices. Violence against women, particularly against wives, remains a huge problem in Zambia. Women continue to suffer in silence, as they are taught that it is culturally inappropriate to discuss matrimonial issues. The culture of silence also hides other forms of abuse, which are common and in most cases go unreported.
The cultural practices not only affect our health but also affect all aspects of our life, including social relationships and disease condition.

**Instruction**

1. The Youth Club leader presents today’s lesson, using the introduction, and having read the “More knowledge” material for this lesson. The club members take turn in reading the text aloud.

2. In Trios, discuss the most common practiced traditions in your area. Ask questions, try to understand their reasons, find explanations, and discuss if these are still valid.

3. Together in the Youth Club, share opinions on the different practices. If you find some practices to be without reason and harming people, discuss what you can do to discourage people from practicing these cultural traditions, and how to support the victims of them.

**More knowledge**

**Some of the positive cultural and common practices:**

**Extended breastfeeding:** In Zambia like in other African countries, it is a common practice for mothers to breastfeed their children for a long time. This is a good practice, as breast milk is far better than any other food a child can receive within the first 6 months to 2 years. This also acts as family planning for the mother, if the baby is exclusively breastfed in the first months of life.

**Nutrition and health of mothers and babies:** It is common practice for women who have just delivered, to be kept at home, away from crowds, and on special diets. It is a traditional belief that it helps the woman to regain lost nutrients during pregnancy and delivery, as well as protecting both mother and baby from germs and bacteria spread by being in contact with many people.

**Environmental practices:** It is a common practice among all people to keep the surrounding of the house clean. Early morning sweeping of the house and area around it is encouraged. This promotes hygiene and improves health.

**Caring for orphans:** In Zambia, it is common practice to care for children of a family member after he/she has passed away. This common practice offers protection and care of orphan children.

**Some of the harmful cultural and common practices:**

**Sexuality education and HIV/AIDS:** The high prevalence rate and mortality, due to HIV/AIDS in many African countries are largely due to some cultural practices, which promote the spread of the virus. For instance, sex is traditionally seen as a private subject. The discussion of sex with teenagers, especially girls, is seen as indecent, unhealthy and unacceptable. As such, young people are left in ignorance as far as sexual health information is concerned, with most information being obtained from peers.
Traditional rituals of passage and knowledge of sexual and reproductive health: In traditional Zambian tribes, there were strict preparations undertaken by boys and girls who were coming of age and reaching sexual maturity. These traditional preparations were done in private by the tribal clan, and these were the methods through which boys and girls were taught about sex and relationships. Over the last few decades, this kind of traditional preparation has been decreasing, but it is still common. A problem is that it is mainly elderly people who train the youth, and they often teach backwards practices, such as girls’ submission towards the husband. However, where these traditional preparations have been abandoned, there is a lack in sexual education of youth. Parent talking about sex to their children is found to be culturally inappropriate, leaving a gap in young people’s education, which is having an impact on cultural attitudes and expectations of sex and relationships.

With no culturally appropriate alternatives, young people are left to form their ideas about sex and relationships from the media: from television, videos and DVDs, and through access to pornography. What these portray about sex and relationships are not an accurate or helpful representation and only serve to fuel myths, misconceptions and attitudes that promote unrealistic expectations of sex, promiscuity and ultimately lead to unfulfilling sexual relationships, and risky sexual behavior causing transmission of HIV and early pregnancies.

Early marriages: Early marriage is any marriage (official or unofficial) of a child under the age of 18 years and it is a violation of the Convention on the Rights of the Child. Early and forced marriage happens globally, but is very common in Zambia, and especially among the poorest, most rural communities. UNICEF estimates that in Zambia 42% of girls are married before the age of 18. This likely leads to sexual activity for a girl at an age, when she is neither physically nor sexually mature. Young brides may become pregnant at an early age; meaning they are more likely to die in childbirth and to experience obstetric fistula. It has further been found, that children born from too young mothers are much more likely to die before their 5th birthday, compared to children born by mature mothers. Because of the large age gap between husband and wife in many of these marriages, lack of education and low status of women, young married girls cannot negotiate condom use to protect themselves against HIV and other Sexually Transmitted Infections (STI).

Gender norms: In traditional Zambian culture, women have a role of production. Women are expected to be the providers in every way, of children, of food and of services. They must organize the home, bring in an income, and submit to their husbands’ every whim. Even women’s body language around the home is subservient - the woman bowing to her husband and approaching him doubled over, almost on her knees to demonstrate her submission to him. When young, girls have to work while the boys just sit; the children watch the father order the mother around. On top of this, in some cultures it gives a man a high status to have many wives and girlfriends to be productive for him. Children are symbols of that production and status, so the more children a man has, the greater his status is. This obviously increases the spread of sexually transmitted diseases, including HIV/AIDS.

In Zambian culture, the husband must pay a bride price (lobola) to his wife’s family, as compensation for their loss of a daughter. In some tribes, the lobola is small and symbolic,
while in others, it can be a huge amount. This leads to some men believing that they have the right to expect their wife to be productive in all aspects, as they have “paid for her”.

Until the age of five, children spend almost all of their time with their mother. Young boys watch their mothers’ behavior towards their father and other males in the family and ideas about the role of women become imprinted in their young minds.

Decision making in the home is often done by the husband, even in regard to issues related to the health of the wife, planning the family, and the use of the family income.

**Inheritance and land tenure:** The issue of inheritance is handled differently throughout the country, reflecting the different customs of the numerous tribes. Traditional methods call for disputes to be settled within the clan, or at the next level, which is the chief. In disputes involving men and women, the clans traditionally usually favor the male’s position. There are no laws preventing ownership of land by women. However, very few women own land in practice, primarily because of cultural and historical precedence. If the husband dies, very often the land or property is grabbed from the widow by the husband’s relatives. Making a will is a way to avoid this to happen.

**Diseases made worse due to traditional behaviors**

**HIV and AIDS:** The high prevalence rate and mortality due to HIV/AIDS in many African countries, is largely due to some cultural practices, which promote the spread of the virus. Stigma and discrimination against people living with HIV and AIDS are common, since they are seen as those with immoral behavior. This definitely discourages people from getting tested and seeking help.

**Malaria:** Malaria is endemic in most tropical parts of Africa. Malaria is responsible for the death of millions of people annually, especially young children. Being in the latitude zone where malaria is endemic is not the only reason. Poverty plays as big a part. Many African houses do not protect against mosquito invasion in any way, as they are built with thatch and mud, which have openings through which mosquitoes can easily enter. It is also a common practice for households to store water in pots and other containers after rainfall, which encourages the breeding of mosquitoes around the houses.

**Traditional birth attendants and home deliveries:** In Zambia, maternal and child mortality is unacceptably high. This trend, apart from the general poor health care services in most rural areas, can be attributed to the common practice of home deliveries using traditional birth attendants. Most pregnant woman in the villages prefers to deliver at home, because of a variety of circumstances, including distance to a health facility, and other children to care for in the household. Most birth attendants are doing a good service, but the problem is that they are not trained and do not have adequate equipment to manage a complicated labor, causing problems to both mother and baby, or even leading to maternal and new-born deaths. The fact is that any delivery can end up being complicated.

**Diarrhea in children:** In some parts of Zambia, people believe that diarrhea is associated with the appearance of the first teeth. Many believe that it is normal for every child to experience one or two episodes of diarrhea, and therefore it is unnecessary to seek medical care when a child has diarrhea. This easily leads to serious dehydration and may cause the death of the child, if medical attention is not sought immediately.

**Unhealthy nutritional practices:** Excessive salt intake is a common practice in our society. It is not unusual for one to see people adding raw salt to the food they are eating, not minding how much was added, when it was being cooked. Increased salt intake is a major risk factor
for hypertension. Other types of food, which are often abused by extensive use, are sugar, soda and cooking oil.

**Mental health:** In many parts of Africa, mental illness is explained as an affliction on man from the spirit world. In some parts of the country, people suffering from mental illness are seen as being the architects of their own misfortune. It is seen as the consequences of one evil or the other they have committed in the past. As such, when someone is mentally ill, it is unusual for his people to seek medical care from the health system. They would rather consult the herbalist, since the cause of the problem, for them, is certainly from the spirit world or inflicted by their enemies. This practice affects the prognosis and overall outcome of the illness, because in most cases these herbalists abuse the power and trust bestowed on them by their people.
Month 10
We all stay healthy

Week 2 – Let us say NO to Malaria

Lesson: How to avoid getting malaria

Introduction
Africa suffers severely from malaria.
Every 30 seconds one child dies. You probably already have had experiences with this disease, and have seen a family member suffer from it, or maybe you even suffered from it yourself. Cases are reported daily. Why does it not cease to exist? You can become desperate when thinking about how many people it affects.
But, do not become discouraged. In this lesson, you will see that it is possible to defeat malaria with coordinated efforts of different actions and resources. You will study it as you experience the fight against malaria in the community.
In order to defeat malaria, you need to join hands and mobilize everyone to accept the responsibility of taking full control of malaria.

Malaria is spread by mosquitoes. The two most important things you can do to avoid getting malaria are:
1. Do not get bitten
2. Stop mosquitoes from breeding where you live.

If someone already has malaria or has a high fever, there is a need for immediate action. People suffering from high fever should be taken to the hospital immediately. It is possible to detect malaria by taking a blood test. The earlier the malaria is detected, the faster it can be treated.

When you make concrete plans for sharing knowledge on how malaria spreads, how being bitten can be avoided, and how breeding of mosquitoes can be stopped, you can decrease the cases of infected people, and even try to eradicate the disease.

These are things you have to keep doing, so that the malaria cases are reduced. Read about the details in the “More Knowledge”.

You may understand and agree that it is necessary for the community to come together to get knowledge on how malaria spreads, and take action.
Do you think an action of this kind is possible, with all people involved, under the leadership of the Youth Clubs and the local leaders, and using all the means available? But we need the will and the determination to do it. A lot of people are suffering from malaria and it has to stop.

Africa suffers from a lot of problems that could be solved with well-coordinated actions from all of us. We have hunger, HIV/AIDS, extreme poverty, wars and others, but they can come to an end if we work together on solving them and put demands on Governments.

Get started by doing this action to take control of malaria in the villages and around your schools.

**Instruction**

1. The Youth Club leader reads the introduction.
2. Together you go through the “More knowledge” material.
3. In Trios, answer the following questions:
   - What causes malaria?
   - List the actions the community can take at home to fight against malaria.
   - How can malaria be treated?
4. The Youth Club discusses the answers from the Trios. Did you get it right?
5. Go on by writing on the blackboard what can be done to fight malaria:
   - What can you do?
   - What can families do?
   - What can the school do?
6. Finally agree on how to get all the people in the village involved in fighting malaria. How to teach them? What actions to take? When? Whom should you involve from the village leadership or other authorities? How to get hold of mosquito nets?

**More Knowledge**

**What Is Malaria?**

Malaria is a life-threatening disease. It is typically transmitted through the bite of an infected *Anopheles* mosquito. Infected mosquitoes carry the *Plasmodium* parasite. When this mosquito bites you, the parasite is released into your bloodstream. Once the parasites are inside your body, they travel to the liver, where they mature. After several days, the mature parasites enter the bloodstream and begin to infect the red blood cells.
Within 48 to 72 hours, the parasites inside the red blood cells multiply, causing the infected cells to burst open. The parasites continue to infect red blood cells, resulting in symptoms like high fever that occur in two-to-three-day cycles.

Malaria is typically found in tropical and subtropical climates (e.g., Africa), where the parasites can live. The World Health Organization estimates there were 198 million cases of malaria diagnosed in 2013. The disease killed more than half a million people in 2013.

**How does malaria spread?**

Malaria can spread if a mosquito infected with the *Plasmodium* parasite bites you. In addition, an infected mother can pass the disease on to her baby at birth. This is known as congenital malaria. Because malaria is transmitted by blood, it can also be transmitted through an organ transplant, a blood transfusion or by shared use of needles or syringes. This means, that if one person is infected, malaria can easily spread to many more. Because it takes some time before the disease breaks out, it is difficult to control.

**What are the symptoms of malaria?**

Symptoms of malaria typically develop within 10 days to four weeks following the infection. In some patients, symptoms may not develop for several months. Some malarial parasites can enter the body, but will remain sleeping for a long period.

Common symptoms of malaria include:

- shaking chills that are moderate to severe.
- high fevers.
- profuse sweating.
- headaches.
- nausea.
- vomiting.
- diarrhea.
- anemia.
- muscle pains.
- convulsions.
- coma.
- bloody stools.
How is malaria diagnosed?
Diagnosis of malaria is made by your doctor. During your appointment, your doctor will perform a physical exam. Your doctor will be able to determine if you have an enlarged spleen or liver. If a person has high fever, always insist on having a blood test taken. This is the best way to be use of the result. There are many other diseases with the same symptoms, so only a blood test can tell if you have malaria or not.
The blood test will show:
- whether or not you have malaria.
- what type of malaria you have.
- if your infection is caused by a parasite that is resistant to certain types of drugs.
- if the disease has caused anemia.
- if the disease has affected your vital organs.

Life-threatening complications of malaria
Malaria can cause a number of life-threatening complications that can result in death. The following may occur:
- swelling of the blood vessels of the brain (cerebral malaria).
- accumulation of fluid in the lungs that causes breathing problems (pulmonary edema).
- organ failure (kidneys, liver, or spleen).
- anemia due to the destruction of red blood cells.
- low blood sugar.

How malaria is treated
Malaria is a life-threatening disease. Treatment for the disease is typically provided in a hospital. Your doctor will prescribe medications based on the type of parasite that you have. In some instances, the medication prescribed will not be effective. Drug-resistant parasites have been reported. These parasites make many drugs ineffective. If this occurs, your doctor may need to change medications, or use more than one medication to treat your condition.

What is the long-term outlook for patients that develop malaria?
Patients with malaria who receive treatment usually have a good long-term outlook. If complications arise as a result of malaria, the outlook may not be as good. Cerebral malaria, which causes swelling of the blood vessels of the brain, can result in brain damage. The long-term outlook for patients with drug-resistant parasites may also be poor. In these patients, malaria may reoccur. This may produce additional health complications.

Be aware of mosquitoes if you travel to another location
There is no vaccine available to prevent malaria. When you travel, you might come across another type of malaria than you are used to. If you are traveling to an area where malaria is common, talk to your doctor. He may prescribe medication to prevent the disease. This medication is the same as those used to treat the disease, and can be taken before, during, and after your trip. It is not good to eat malaria medicines for a long period. You may also want to take extra precautions while traveling. Bring a mosquito net along. Sleeping under a mosquito net may help prevent being bitten by an infected mosquito. Covering your skin or using an insect repellent containing DEET may also help prevent infection.
What you need to know about how mosquitoes behave:

1) Mosquitoes breed in stagnant (not flowing) water like swamps, pit drains, water left in tins or other rubbish, and in tall grasses.

2) Mosquitoes do not fly very far away from the place they are hatched, usually they do not move more than 1-2 miles, and so if you can clear an area of about 2 miles around your village, you can get rid of them.

3) Mosquitoes can smell human beings from a distance of 30 meters.

Actions to take to prevent getting malaria

Do not get bitten

1) Sleeping under treated mosquito nets provide the best protection. The nets should be treated with a chemical that kills mosquitoes.

2) Wear long sleeves and trousers in the late afternoon and at night, because this is when mosquitoes are most active.

3) Some herbs keep mosquitoes away. Plant Artemisia afra or lemongrass around the house.

4) You can also use Artemisia leaves/branches and put them in the windows at night as a repellent.

5) Bring leaves of lemon grass, tephrosia and Artemisia afra into the rooms where you sleep, and brush the walls with them.

6) Use mosquito coils in the bedroom at night, to keep mosquitoes away.

7) Have fly screens in the windows.

8) Make sure that mango trees and maize plants are not planted too close to the houses. They attract mosquitoes because they are full of sugar. Find out locally which other plants attract mosquitoes.

9) Use mosquito repellent on your skin, particularly on your hands, neck, face and ankles.

10) Make your own insecticides from lemongrass, Artemisia afra, fish bean, papaya leaves and African cucumber.

11) Spray your house and surroundings with anti-mosquito spray to kill the mosquitoes.

12) In some areas where malaria risk is high, or if you have been sick from malaria many times, it may be a good idea to take anti-malaria tablets. These tablets reduce the effects of malaria, but they do not altogether prevent it, and some of them have unpleasant side effects. You should get advice from your local clinic about whether or not to take these tablets.

Stop mosquitoes from breeding in your surroundings

Destroy their breeding places

- Cut the grass around your house, the best is to clear an area of 1 square km.
- Get rid of all stagnant water indoor and outdoor
- Keep your surroundings clean, and clean up rubbish that could collect water.
Look at the picture on the next page to see which actions you can take in a village.

Together we can get rid of malaria
Month 10
We all stay healthy

Week 3 – No more malaria

Action: Community action to fight malaria

In this month’s community action, you are going to start campaigning! To stop malaria, campaigns are needed repeatedly, until you have reached mosquito free zones in the school, in the village and in your homes. It is especially important to campaign just before the rainy season, to prevent mosquitoes from multiplying uncontrollably. But action is needed throughout the year where mosquitoes are around.

Instruction

Plan a campaign that has two parts:

1) Explain to people in the community why you get ill from malaria, and why you need to get rid of ALL mosquitoes. Use slogans, songs, drama and talks. Explain how to avoid being bitten, how to destroy the mosquitoes breeding places, and why people with high fever need to get to the clinic and get a blood test.
   Involve the village leaders and health authorities.

2) Secondly, mobilize people for an action. Start with the whole village or pick a smaller, defined area. Prepare how you can destroy the mosquitoes’ breeding places by getting rid of all stagnant water, cleaning the surroundings for rubbish that can collect water, and cutting the grass around the houses in an area of 1 km.
   Find out from the clinic how to get hold of mosquito nets free of cost. These are usually available for children and pregnant women.
   Maybe you can also mobilize a group of women to stitch nets for the rest of the community.
   Get hold of the chemicals used to treat the nets.
   Get hold of lemon grass and Artemisia plants.

Make a list of everything you will need to do, and organize the tasks.
Invite people to the campaign and go for it.

Avoid being bitten!
GET RID OF THE MOSQUITOES!
Week 4 – Counting our results

Summing up what we have learned during the first year in the youth club

Introduction
You have now finalized your first year in the Youth Club. You have been running
the club together and you have learned many new things during the courses,
lessons and action you have carried out.

Looking back at the year and summing up what you actually have learnt, and
which changes you have experienced in your own live and in the life of your
comrades in the club, is a good way to become more conscious on what have
happened to you.

You could start by making your own list of what you have learned and the
influence this has had on the course of your life.
Share your lists by presenting your results for each other.
Ask the club to comment on your list, and maybe add any changes they have
experienced in each of you.

When you count your results, you could list:
• New knowledge on things you did not know about before.
• Things you have been doing, which you never expected yourself to be able to
do.
• Things you have learned from working as a group, and from each other.
• Changes in the way you look at your future.
• Changes in your general behavior.
• Any other issues or experiences you would like to share.

When the Youth Club has made its own evaluation of the first year in the club,
you could decide to share your experiences with your family or some friends,
and tell them what the Youth Club has been doing during the year, maybe
showing posters from community events or performing plays you have made
earlier.
Instruction

1. Follow the proposal for counting your results and add any issues or ways to share your experiences, you find it important to add. You could take help from the Youth Club Program Manual to remember all you have been doing.
2. End with a discussion on whether or not to continue having weekly meetings in the club.
3. If you decide to continue, you could use the first meeting in the new club year to make a program with things you would like to learn about, excursions you would like to do together, improvements you think it is important to push for in the village and actions or events you would like to do together.
The production of this Program Manual has been assisted by use of material from the following sources:

**FAO**
A vegetable garden for everyone

**Hesperian Foundation:**
A Community Guide to Environmental Health

**Humana People to People**
Food For Knowledge Newspapers 1-4

**The GAIA-Movement**
40 Green World Actions
Carbon reducing Activities at Humana People to People projects

**UNICEF**
Early learning and development

**UNICEF and DAPP Namibia**
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