

A photograph of a rural village scene. In the foreground, a river flows with several small wooden boats. The middle ground shows a cluster of wooden houses with corrugated metal roofs, surrounded by lush greenery, including banana trees and other tropical plants. The background is filled with dense trees under a cloudy sky. The text is overlaid in the center of the image.

RENEW HEALTH PROMOTION
TOOL KIT BOOKLET #2
HEALTH LESSONS

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OVERVIEW

This is a handbook for trainers to engage their communities in health topics in order to live healthier. Because knowledge without action is useless, it has two kinds of information to aid community health trainers lead their communities into action.

1. Information on health lessons.
2. Tools to engage communities in discussion and actions that improve health.

GOAL

To promote ongoing community-initiated health improvement.

METHODS

By imparting a holistic view of health, Renew Health Promotion creates health ownership so that each community:

1. Uses local resources and draws from the wisdom of the community to take action for health improvement
2. Is encouraged by results
3. Takes ongoing health initiatives
4. Seeks active partnerships with government and non-government organizations for ongoing health improvements
5. Shares their gained expertise with others

The method involves engaging community participation in health-related discussions and learning activities facilitated by the trainer. Each trainer will know how to best adapt the material to be relevant to their community and culture. Each event should be interesting and fun, generating involvement of community members of all ages, genders, and social status.

In Christian communities, health is viewed in the context of the love of God in Jesus Christ

HOW TO USE THIS BOOK

Each lesson provides the trainer with the activities and concepts to cover as well as questions to facilitate discussion within the group. Before each lesson, the trainer should review the lesson and the section *Supplies & Preparation for Lessons, pg 4* in this booklet to prepare for teaching the lesson. To view and download the entire package of Renew Health promotion booklets and training materials, go to <https://renewoutreach.org/training/renew-health-promotion/>.

SUPPLIES & PREPARATION FOR LESSONS

DOWNLOAD ACCOMPANYING WORKBOOK & LAMINATIONS:

<https://renewoutreach.org/training/renew-health-promotion/>
It is recommended that each participant have a workbook. Provide each person in group with Workbook 2 for reference, or have them share one

LESSON 1: WATER CONTAMINATION, PG 6

1. Review opening activity, questions, & information.
2. **Items needed:** Workbook 2 page 2 for group, CAWST Lamination of Water Contamination.

LESSON 2: WATER STORAGE, PG 12

1. Review opening activity, questions, & information.
2. **Items needed:** Workbook 2 page 3, CAWST Lamination of Water Storage.

LESSON 3: WATER TREATMENT, PG 14

1. Review opening activity, questions, & information.
2. Gather the tools for the SODIS demonstration listed below in Items Needed.
3. Plan the SODIS demonstration. Decide if you are also going to do the drama; demonstrate boiling, water treatment options, and/or Xwater filtering techniques.”
4. Review the Information.
5. **Items Needed:** Workbook 2 page 7, Lamination of SODIS, empty bottle or cup for optional drama; SODIS demonstration- Two empty clean 1 to 2 L bottles with caps. Fill one with turbid water, fill the other with clear water. Flat surface in the sun. Optional items for optional demonstrations-Rain Water Treatment Demonstration- 5 drops of standard household bleach, an eye dropper, a 4 Liter container with a lid. Filter Demonstration- a commercial filter you know how to use, or the items for a homemade filter. A homemade filter, refer to the text, would involve a container to hold the materials that has a lid and spigot near the bottom. The layers- Gravel, sand, charcoal, cloth, large amount of boiling water to thoroughly saturate the layers. A bacteria testing kit for water supply.

LESSON 4: WATER SOURCE PROTECTION, PG 18

1. Review starter lamination, questions, & information.
2. **Items needed:** Workbook 2 page 4, Water Source Protection Lamination.

LESSON 5: GENERAL SANITATION, PG 20

1. Review starter lamination, questions, & information.
2. **Items needed:** Workbook 2 page 11, CAWST Open Defecation/General Sanitation Lamination

LESSON 6: SANITATION- OPEN DEFECATION, PG 22

1. Read the Starter Drama & review questions & information.
2. **Items needed:** Workbook 2 page 9. 4 volunteers who will play a child, the mother, the father and the fly. Practice it for a few minutes and then have them act it out as you narrate. A stick, a pretend kitchen and place to sit at a table to eat.

LESSON 7: LATRINES, PG 25

1. Review starter lamination, questions, & information.
2. **Items needed:** Workbook 2 page 10, Latrine lamination.
 - a. Optional activity 1- someone from the community to lead a “walk around” to ask questions and observe local practices;
 - b. Optional activity 2- Two bowls of rice, a small amount of paprika and sugar, a sample of feces or put the bowl near an open defecation field;
 - c. Optional activity 3- A large map of the community done in the dirt or sand which the community makes. Designate homes, walk paths gardens, public buildings, football fields, etc. with leaves sticks or paper. Colored sand or flour. Fly Trap- a 2 L bottle, a sharp knife or scissor, duct tape, something to attract flies- rotten food or feces.

LESSON 8: DEHYDRATION, PG 28

1. Review starter lamination, questions, & information.
2. **Items needed:** Workbook 2 page 5, Dehydrated Child Lamination and the ORS Lamination. A 1 Liter bottle of water, 8 tsp of sugar, ½ tsp of sugar, a funnel, a measuring spoon or you can use your hand as shown on the lamination.
 - a. Optional- make another 1 Liter bottle of water with sugar and salt but make this one TOO SALTY by putting in 8 tsp of salt and ½ tsp of sugar.
 - b. Optional- demonstrate washing hands with RUNNING water before making the ORS.

LESSON 9: SANITATION-TRASH, PG 30

1. Read the Starter Drama & review questions & information.
2. **Items needed:** 6 or so Volunteers- one small family to represent the flies, one the insects and the other the rats. Read the drama with them and practice for a few minutes- the buzzing around of the flies, the moving antennas of the insects, the wiggling of the noses of the rats. Two pretend house- one of the messy family and the other of the clean family. A place to draw the trash burial.

LESSON 10: FOOD CONTAMINATION, PG 32

1. Review starter lamination, questions, & information.
2. Items needed: Workbook 2 page 8, Food Contamination Lamination

LESSON 11: HANDWASHING DEMONSTRATION, PG 34

1. Review questions & information for lesson.
2. **Hand washing Demonstration 1:** Read the Starter Demonstration of Hand washing. (During the demonstrations, be sure to carefully explain that daily activities get microbes on our hands, and that the glitter or soot just represents microbes but is NOT microbes. Also feel free to make a little drama. Examples: Mother washes the baby's messy bottom and then, before fixing dinner, does one of the 4 ways to "clean" her hands in the demonstration. Ask "Which one of the 4 things would you like her to do before fixing your dinner?!"
3. **Items needed for Demonstration 1:** Glitter or soot, 3 basins, 1 or 2 bars of soap, pitcher of clean water, 4 demonstrator participants.
4. **Preparation for Demonstration 2:** Read the Starter Demonstration of how to make a Tippy Tap.
 - a. Recruit a group of capable participants to make or to help you make a tippy tap. Do this by following the directions on Workbook page 14. Arrange to do this sometime between classes.
 - b. Demonstrate to the group how it was made and how it is used. Have everyone wash their hands.
 - c. Ask the group to comment on why it washes microbes off hands so well, where in the village a Tippy Tap would be the most useful. Ask them what would be needed for the
 - d. already made Tippy Tap to do any good. (maintained, water filled by reliable volunteers, and used!)
 - e. **Items needed for Demonstration 2:** Workbook page 14, Tippy Tap Lamination, a place to suspend the Tippy Tap, a clean bottle or jug, something to poke two holes in the bottle- a nail heated by a candle can heat a hole in a plastic container, a bar of soap, a nail to poke a hole in the bar of soap, a string or twine to string thorough the soap, a string or twine to attach to the jug or bottle neck to the pedal, a stick for a pedal to tilt the jug or bottle.

LESSON 12: NUTRITION, PG 40

1. Review the 2 Starter activities. Decide to do one or both.
2. Review the questions & information.
3. **Items needed for Activity 1:** Booklet 1, Lesson 9. You will need to review the Modified Ten Seed Technique. Something to represent the kinds of food commonly eaten- paper you can draw or write on, or illustrations of foods; 10 beans or seeds.
4. **Items needed for Activity 2:** 4 Volunteers to represent the brothers in the drama. Spend a few minutes telling them what kind of food groups or diet they represent and have them practice. Pieces of color paper or tee shirts in red, yellow/green, brown/beige, all of the above colors.

LESSON 13: HIV, AIDS AND STI, PG 42

1. Know the story on the Starter Lamination (HIV/AIDS cartoon)
2. Review the Information & questions. NOTE: Always gauge the openness and culturally appropriateness of sexual health discussions by talking with the elders and leaders first. Consider talking with the men and women separately. Ask if they have Questions. Ask them Questions- What is HIV, what is AIDS, how does one get these diseases, how can one prevent these diseases, are there known STI's in their community, what are the commonly held beliefs about STI's in their culture, is treatment available in their area?
3. Discuss other related topics as relevant- the immune system, other sexually transmitted diseases.
4. **Items needed:** HIV/AIDS Lamination. Optional- if there is a microscope and a sterile way to obtain a blood sample (glucometer) red blood cells and maybe a white blood cell can be seen on a thin smear on a microscope slide.

LESSON 14: DIABETES, PG 46

1. Review the Starter Lamination, & information.
2. Review the questions. Ask if they have questions. Ask them Questions: Do they have diabetes that they know of in their communities, how does one prevent diabetes, what treatment is available to them in their area?
3. **Items needed:** Workbook page 11, Diabetes Lamination

LESSON 15: NATURAL FAMILY PLANNING, PG 48

1. Review the Starter Lamination or Circle of Beads Prop
2. Review the information & questions
3. Review the Questions. Always gauge the openness and culturally appropriateness of sexual health discussions by talking with the elders and leaders first. Talk with the men and women separately. Ask if they have Questions. Ask them questions- What are their community held beliefs and practices of both planning and preventing a pregnancy, what methods of birth control and reproductive or gynecologic/obstetrical health care do they have available, when do they marry and how many children do most families commonly have, who provides the education of sexual matters in the family or community?
4. **Items needed:** Natural Family Planning Lamination or Circle of Beads. Renew Health Toolkit Booklet 3, Healthy Sexuality is a resource for more information.

LESSON 16: RESPIRATORY ILLNESS, PG 50

1. Review the three potential Demonstration Starters. Decide which one(s) you will use.
2. Review the Information & questions.
3. **Items needed:**
 - a. Demonstration one- a spray bottle of some fragrance.
 - b. Demonstration two- a chair or other surface for participants to relax and notice their breathing.
 - c. Demonstration three- 4 volunteers. Take a minute to read the drama to them beforehand and have them act out their parts.

LESSON 17: HIGH BLOOD PRESSURE, PG 52

1. Review the Starter Lamination & information.
2. Ask the Question- What complications of high blood pressure do they see in the drawing? Review with Questions. Ask if they have Questions. Ask them Questions- Do they have high blood pressure in their community, how is it measured, how does one prevent high blood pressure, what treatment do they have available?
3. **Items needed:** Workbook page 13, High Blood Pressure Complications Lamination

LESSON 18: ADDICTION, PG 54

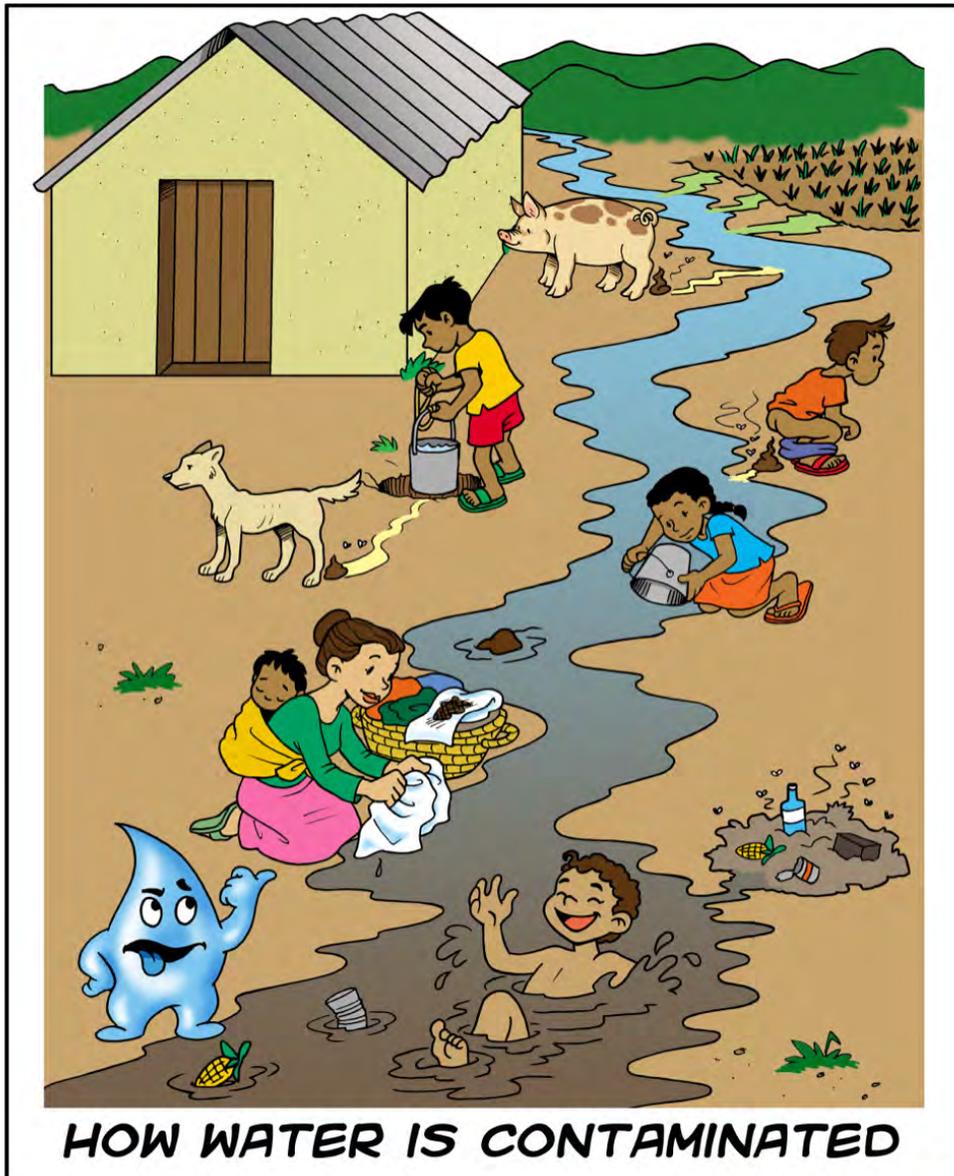
1. Review the Starter Drama & lesson information.
2. After the drama, ask the questions. Always gauge the openness and cultural appropriateness of drug and alcohol discussions by talking with the elders and leaders first. Consider talking with the men and women separately. Ask if they have Questions. Ask them Questions- What are the practices of alcohol or drug use in their communities, are they experiencing adverse consequences of drug or alcohol use in their communities, how is the community responding to any problems and is there treatment for serious substance abuse available to them?
3. Consider a discussion of the Bible verses at the end of the lesson.
4. **Items needed:** Volunteers for a drama- a main person, friends and family, the village wise man. The egg and the dragon character are best imagined. Take a couple of minutes to tell each character or group about their part, to prepare them. A narrator to narrate the story as the volunteers act it out. Bible.

LESSON 1: WATER CONTAMINATION

OPENING ACTIVITY: DISCUSSION OF THE CAWST PICTURE

THREE QUESTIONS

1. What do you see?
2. What does it mean?
3. What can we do about it?



DEFINITION

Ask: What is clean water? What is dirty water?

Clean water does not have microbes. Unclean water has microbes that will make you sick if they get into your mouth and stomach. Water that looks clear does not mean that it is safe to drink. It may contain microbes you cannot see.

CAUSATION

Ask: Why does dirty water make people sick?

Microbes in your mouth from unclean water multiply inside you and make you sick. Do not use unclean water for drinking, for washing fruits and vegetables, for making Oral Rehydration Solution or ORS, and for brushing your teeth. Getting dirty water on your hands and touching your food or mouth also lets microbes enter your body, where they will grow and multiply inside you and make you sick.

SIGNS & SYMPTOMS

Ask: What happens to someone who drinks dirty water?

Microbes in unclean water cause diarrhea, bloody diarrhea, vomiting, stomach pain, fever, weight loss, bloating, and malnutrition. Diarrhea can cause death.

PREVENTION

Ask: How can we prevent diarrhea that comes from drinking the microbes in dirty water? Refer again to the picture.

We prevent sickness from dirty water when we identify and come up with solutions for these sources of contamination:

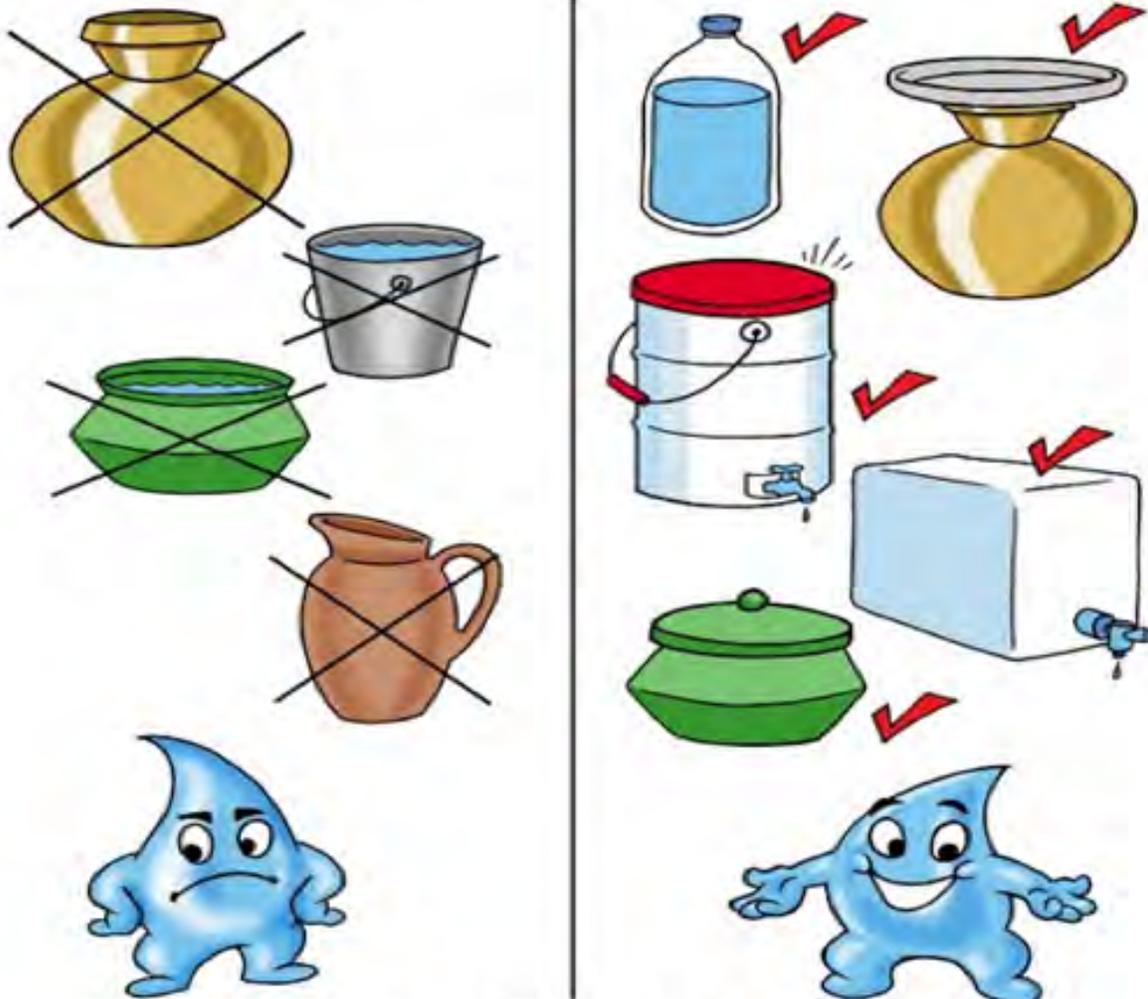
- Human or animal feces unburied and near a water source
- Waste or trash buried within 33 meters of a water source
- Evidence of washing dishes and bathing in or near the water source
- Trash in or near the water source
- Livestock or animals near the water source
- Dirty containers, glass or pollutants in water
- Open defecation within 100m from water
- An unprotected and contaminated well

LESSON 2: WATER STORAGE

OPENING ACTIVITY: DISCUSSION OF THE CAWST PICTURE

THREE QUESTIONS

1. What do you SEE?
2. What does it mean?
3. What can we DO about it?



**STORE YOUR CLEAN
WATER PROPERLY**

Ask: Why is storing water important?

Storing clean water properly protects water from contamination.

Ask: How can you keep clean water clean?

1. Water needs to be **covered** to prevent contamination and prevent providing a place for mosquitos to breed.
2. The *best types* of **containers** have a narrow opening for filling near the top and a tap or spigot near the bottom for letting water out.
3. Put water only in clean containers. Water storage containers must be **cleaned** regularly.
4. Every time water goes from one container to another, make sure that the new container has been washed and is **clean**.
5. Make sure **only clean items touch the water**.

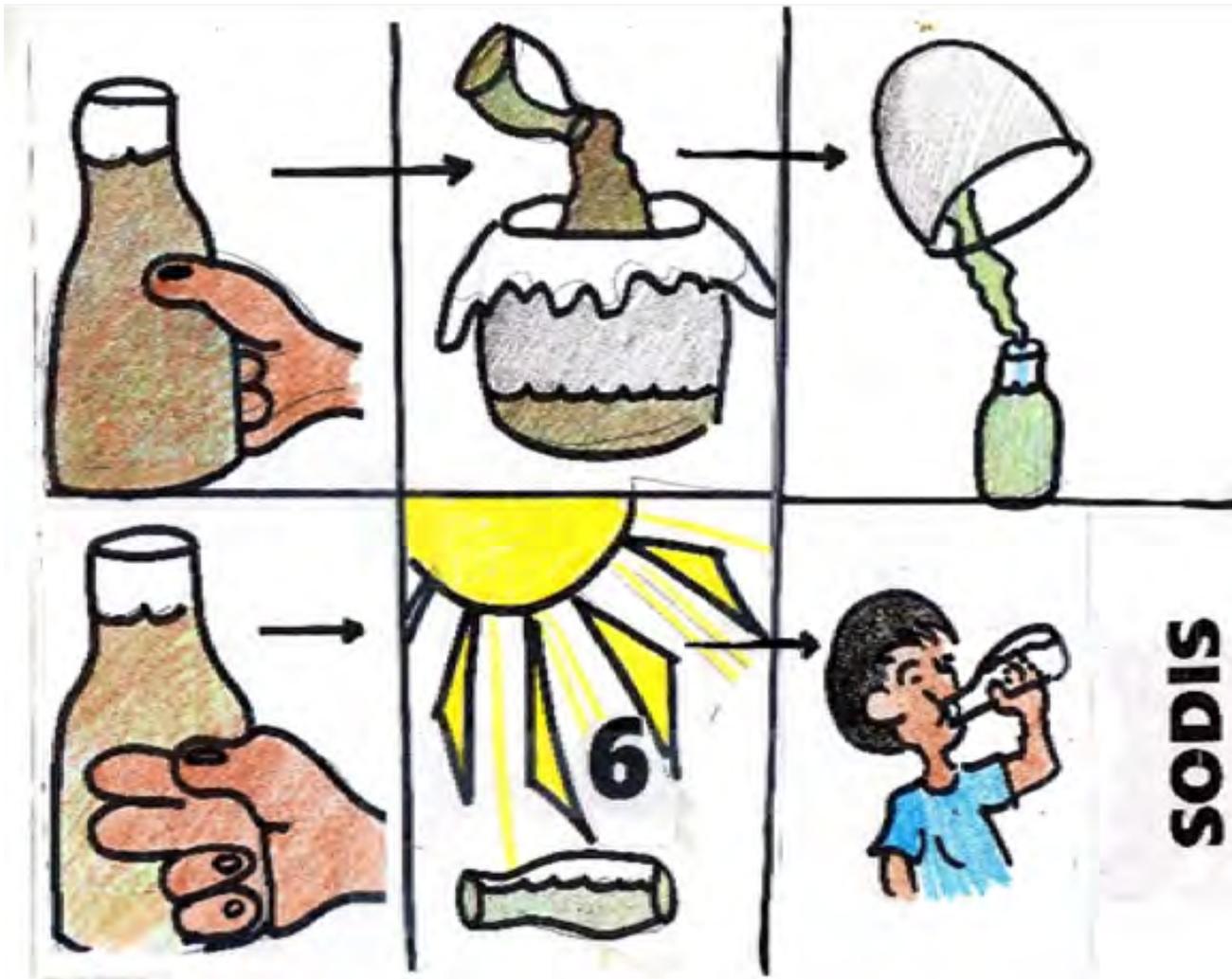
For example, use a clean dipper to get water out and make sure the part of the handle of the dipper that people touch does not touch the clean water. No hands should touch the water.

LESSON 3: WATER TREATMENT

OPENING ACTIVITY: DEMONSTRATE THE FOLLOWING

Ways to Treat Water

1. Rolling boil for **60 seconds**
2. Chlorine drops – **5 drops/4L**
3. Commercial or handmade filters
4. SODIS



Ask: How can you make water safer? Here are a number of ways to make water safe-water treatments:

1. BOILING

Water can be made safe for drinking by boiling it at a rolling boil for 1 minute. A rolling boil is when there are many bubbles and the surface of the water is “rolling’ or choppy. After a **full minute**, the water can be cooled and will be safe to drink.

Store boiled water properly to prevent contamination.



2. SODIS WITH DEMONSTRATION

OPTIONAL DRAMA

Narrator: “A man is in a canoe and he is paddling and getting thirsty. He gets out his bottle or hand to scoop up some river water to drink. STOP!”

Man in canoe: The actor freezes.

Narrator: “Should he drink this water? Does he have alternatives?”

WATER CAN BE MADE CLEAN BY SUNLIGHT. When we use sunlight to kill bacteria it is called **SODIS** which stands for **Solar Water Disinfection**. To be successful, enough sunlight has to pass through the water for a long enough time period.

STEPS OF SODIS

ILLUSTRATION: PG 8 & WORKBOOK PG 7

- 1 Find a clear plastic bottle that is 2 liters or smaller.
- 2 Make sure the bottle is fairly new. Lots of scratches will keep the sun from entering the bottle. Take off wrapper.
- 3 Rinse out the bottle out and clean it well.
- 4 Fill the bottle with clear water, NOT muddy or dirty water. Using clear water allows the sunlight to pass through the water completely and kill microbes. If the water is cloudy, it must be filtered until 2 fingers can be seen through the bottle. (See Filtering illustration on next page.) Use a commercial filter or create your own by pouring the water through a clean cotton tee-shirt into a clean container until 2 fingers can be seen through the water.
- 5 Place the cap tightly back on the bottle. Shake.
- 6 Put the bottle in a very sunny place on a firm surface. A reflective surface like a metal roof works best because it reflects the light back into the bottles. Do not place the bottle on soft surfaces.
- 7 Leave the bottle in the sun for at least one day. At least 6 hours. If it is cloudy, leave it for two days
- 8 After the day or two, take the bottle out of the sun overnight so that it cools. The next day it will be ready to drink
- 9 Drink the water directly from the bottle. Drinking the water out of the same bottle used in the SODIS method makes sure that it does not become dirty from being poured into something else. If possible, each person should have their own bottle.
- 10 Replace the bottle often because the plastic deteriorates and becomes toxic over time.

3. RAIN WATER

Water can be collected from a roof by gutters leading to a collection container. It must then be filtered through a clean cloth and treated a number of ways- including boiling, treated by the sun (SODIS) or by bleach. (5 drops of bleach for 4 Liters) Always store water properly to keep it from contamination.

4. FILTERING

There are many different kinds of homemade or commercial filters which can be used to remove harmful microbes from water. Using a filter often involves these three steps.

1. Because microbes are so small the water must be then treated or further filtered to remove microbes. There are many kinds of filters.
2. Allow the water to settle. This allows the larger things to sink.
3. Filter the water on the top through a clean cloth to remove more particles.

COMMERCIAL FILTERS

They can be large enough to serve a city, small to serve a household, or smaller for personal use. They can be purchased in partnership with a water system organization.

Water engineers and specialists are helpful in knowing what water filtering system options best fit your community. Their expertise is necessary especially when there are pollutants, such as chemicals or oils, in the water.

HOMEMADE FILTERS

These can be constructed is by filtering water *through layers of clean sand, gravel and clean fire charcoal*.

- Once the system is set up, boiling water is poured through it the first time to clean the filter.
- The water should be tested. If there are bacteria, the water will also need to be treated to be safe.
- All filters need to be cleaned periodically, and this means disassembling the homemade filter, drying it in the sun and reconstructing it.
- All filtered water should be tested periodically to be sure all microbes have been removed.
- These are the different layers which will need to be assembled in a container for a homemade filter (IMAGE AT RIGHT).



HOMEMADE FILTER: Different layers to assemble in a container

LESSON 4: WATER SOURCE PROTECTION

Ask: How can you protect your well water source?

Well water is usually clean but it needs to be test initially and periodically. To protect your well water source:

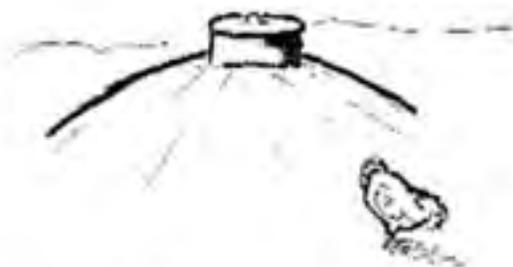
1. Build up the mouth of the scoop hole. This prevents runoff water from draining into the well.
2. Make a cover slab. This prevents wastewater from entering the well. The well is also safer because children and objects will not fall in.
3. Line the top of the well with bricks or with concrete or rocks. That prevents the well from caving in.
4. There are a number of ways to draw water out of a well such as a pump or a simple windlass, bucket, and chain. Consider expert help. Be sure to test the water for microbes and take precautions not to contaminate the water as it is being drawn.
5. Build a drainage platform with a runoff canal. That keeps the area around the well clean and dry. If the area is wet and muddy, germs can grow and mosquitos can breed.
6. A wall protecting the well keeps animals and their feces away. The well should be 100m from trash and latrines.
7. The drainage water can be used to irrigate a garden.



1. Unimproved scoophole



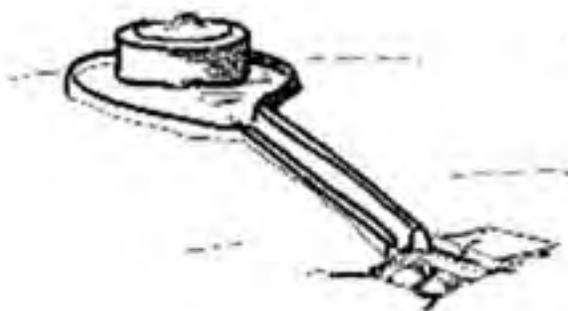
2. Mouth of hole built up to keep out runoff



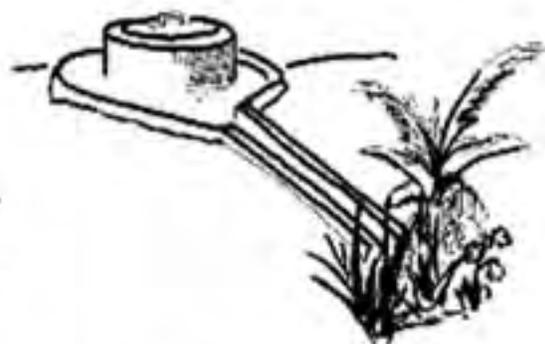
3. Mouth closed off with barrel and lid



4. Top strengthened with bricks and small drainage platform



5. Protected water hole with drainage platform and runoff channel



6. Protected water hole with drainage platform, runoff channel, and garden

Source: Conant and Fadum 2008

LESSON 5: GENERAL SANITATION

OPENING ACTIVITY: DISCUSSION OF THE CAWST PICTURE

THREE QUESTIONS

1. What do you SEE?
2. What does it mean?
3. What can we DO about it?



DEFINITION: *Sanitation* is a clean place to live.

CAUSATION

Ask: What makes a place clean? Why is a clean place better for you?

Microbes grow in an unclean environment and they can make us sick.

Microbes grow in feces, garbage, and spoiled food. The microbes spread to our bodies by our hands, by flies that land on our food, by pests like insects and rodents that get into our food supply, by insect bites, by animal bites, by unclean food preparation and cooking areas that contaminate our food.

SIGNS & SYMPTOMS

Ask: What kinds of symptoms do people have more often in unclean places?

Diarrhea, vomiting, fever, abdominal pain, eye diseases, skin diseases, respiratory illnesses; mosquito and insect carried borne diseases like malaria, dengue and ZIKA. Poor sanitation can lead to death.

PREVENTION

Ask: What kinds of things can *we do* to have a clean place to live and prevent disease?

1. Feces and animal waste management
2. Clean Water management
3. Trash Management and Food/kitchen management
4. Reduce pests in our house

LESSON 6: SANITATION–OPEN DEFECATION

OPENING DRAMA

Ask for volunteers to perform a drama. You will need 3 family members and 1 fly. Practice before to help everyone understand their roles.

Ask them to act out the following while you narrate:

Narrator: A man is taking a walk around the community. He steps in feces, makes a face, and scrapes it off his shoe with a stick. He throws the stick on the ground and walks away.

A child finds the stick and plays with it. (He or she throws it into the air and catches it, pretends it is a machete, draws with it on the ground, etc.)

The child's mother comes and taking the child by the hand walks home with the child.

The mother prepares the food but does not wash her hand. She puts the food on the table.

Meanwhile a fly finds the feces and the stick and walks all over it, getting the feces all over the feet and mouth. Then the fly flies to the house, and walks around, or touches, and starts to eat the food. He flies away.

The mother, father and child all sit down and begin to eat the food. They all get sick and fall to the floor or run off vomiting.

CHE/ MAI adapted skit

THREE QUESTIONS

1. What do you SEE?
2. What does it mean?
3. What can we DO about it?

DEFINITION

Open defecation is defecating in the open. It is very common all over the world.

Ask: Are there latrines in your community? Where are they located—In private house or yards, in public places? What are the common practices in your community? What do you do when you travel by river?

CAUSATION

Ask: How does defecation lead to disease?

The feces in the open is stepped on, touched and carried by flies and by our hands to our mouths. The microbes (and feces is mostly microbes...the dirtiest thing on earth!) make us sick because they get into our stomachs, multiply and grow.

This damages us inside, takes away our energy and causes diarrhea and other diseases. Feces can kill or harm us, and our children are especially vulnerable.

SIGNS & SYMPTOMS

Ask: What are the signs and symptoms of OD?

OD leads to diarrhea, vomiting, abdominal pain, eye disease even blindness, respiratory symptoms, skin diseases. Feces and unclean water are the two most common causes of diarrhea and dehydration, which can be fatal.

Some diarrhea is very severe, especially with a microbe in feces called Chorea. People with Cholera can become dehydrated and die within hours.

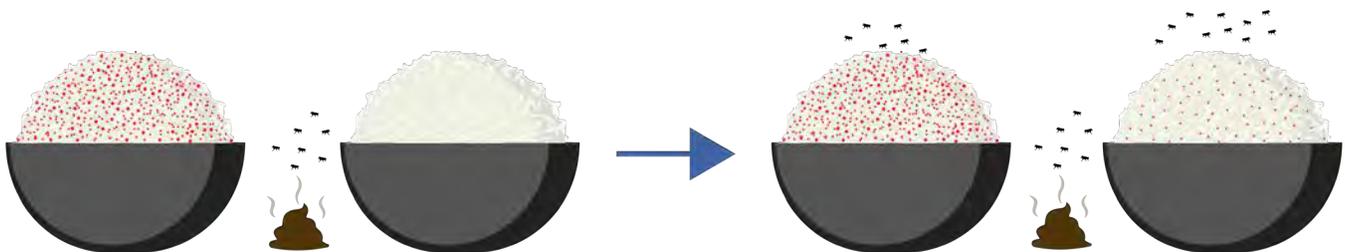
PREVENTION

Ask: What are some of the ways we can prevent sickness from feces from OPEN DEFECATION? Refer to drama/picture on WB p2.

1. Bury feces.
2. Wash Hands.
3. Keep animals form home and garden.
4. Help children use the latrine, bury feces and wash hands.
5. Wash diapers away from rivers or water sources and places where people swim, bathe or get their drinking water.
6. Keep wells covered.
7. Keep food covered from flies and other insects.

OTHER POTENTIAL LESSONS ON OPEN DEFECATION

1. Take a “walk around” the community and increase awareness of local defecation practices. Ask lots of frank questions to understand current practices. Visit defecation areas, latrines. Then ask what was seen, what the community thinks, what they think they would like to do about it.
2. Take 2 bowls of rice and a little pile of feces and put them side by side. On one bowl of rice put generous amount of paprika. Notice what happens over time to the clean white rice. Point out that flies carry the paprika and feces on their feet to the rice and turn the white rice to pink.



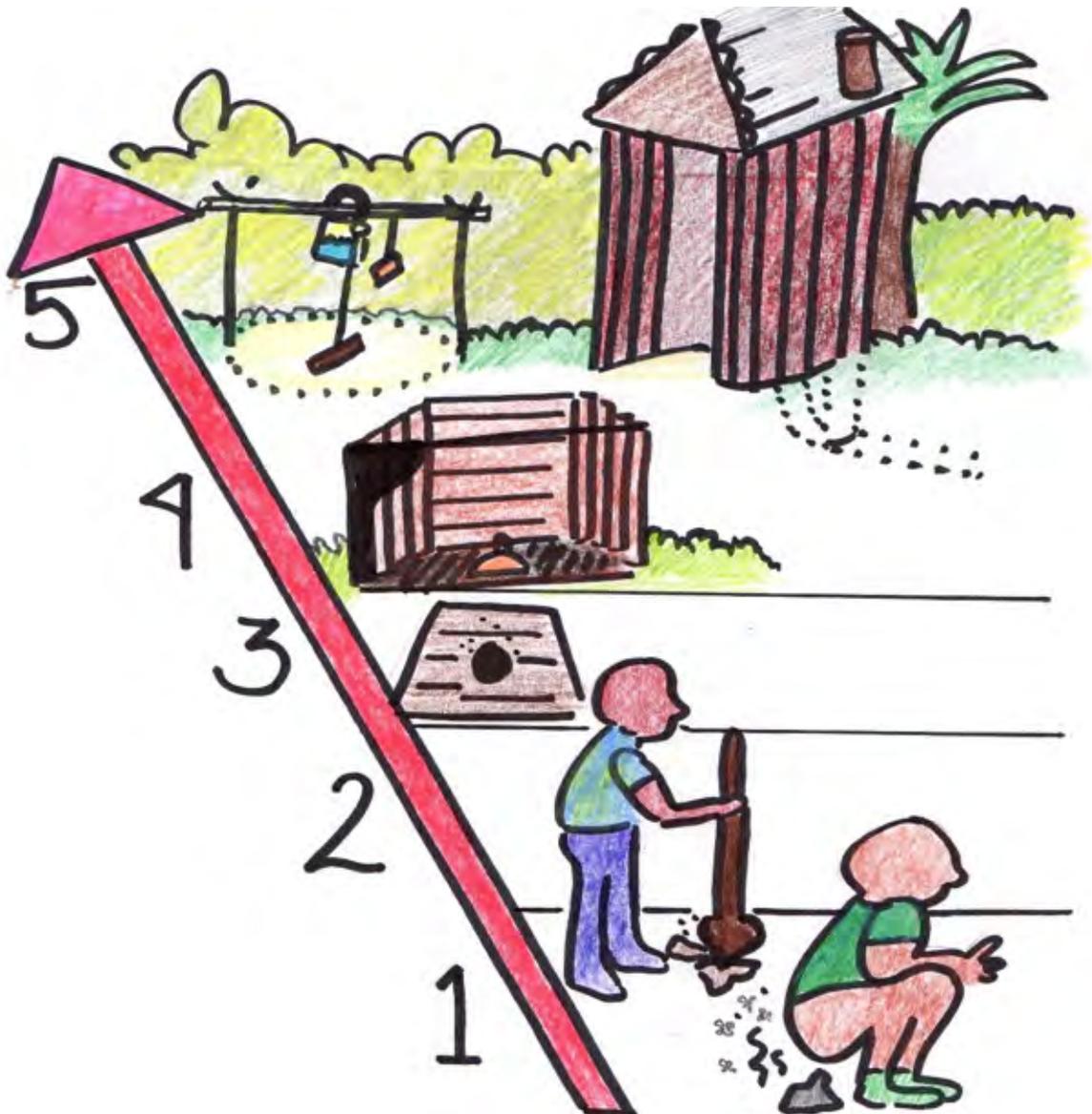
3. Create a large map of the community. Have people put a handful of colorful or white sand where they defecate- under normal circumstances, at night, if they are sick with diarrhea. Notice how prevalent feces throughout the environment.

A good example of a UNICEF program addressing OD: http://www.youtube.com/watch?v=HL_HdOPKzMw

LESSON 7: LATRINES

THREE QUESTIONS

1. What do you SEE?
2. What does it mean?
3. What can we DO to move up the ladder?

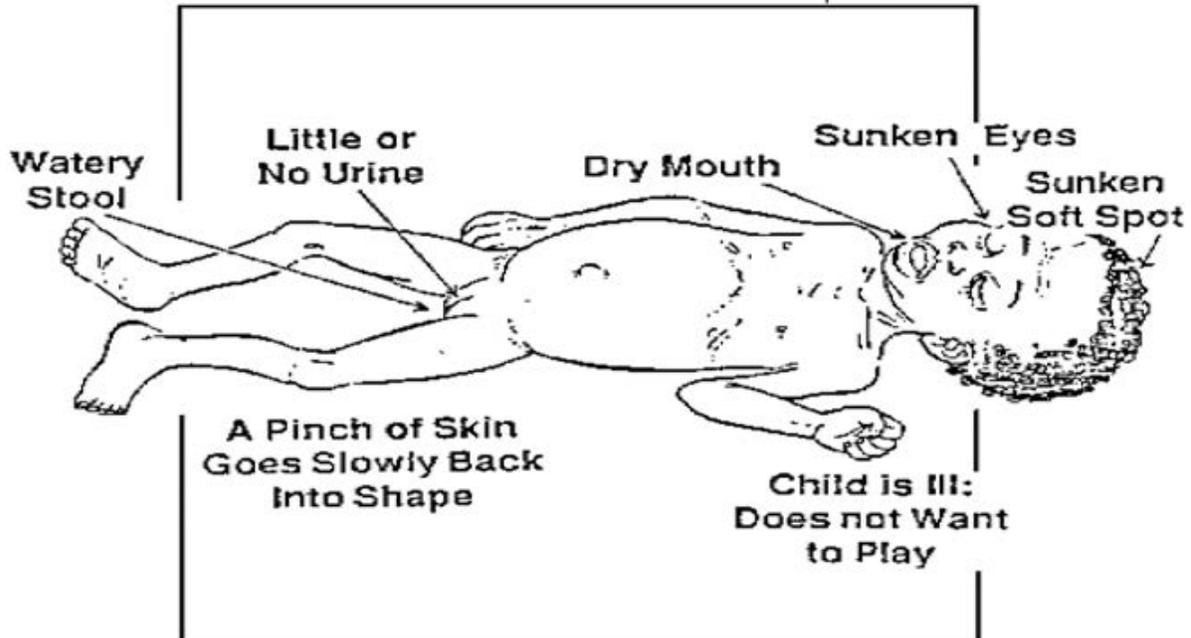


LESSON 8: TREATING DEHYDRATION

OPENING ACTIVITY: USING THE PICTURE,
IDENTIFY THE SIGNS OF DEHYDRATION

THREE QUESTIONS

1. What do you SEE?
2. What does it mean?
3. What can we DO about it?



Hesperian Illustration

DEFINITION

Not enough water in the body is called dehydration.

CAUSATION

The body is made up mostly of water. Every part of it needs water to function. With diarrhea, vomiting, or excessive sweating the body can lose enough water for the person to become very sick or die. Children are the most vulnerable.

SIGNS AND SYMPTOMS

The mouth is dry, no tears, decreased urination, stools can become loose, the skin “tents” when pinched, the fontanelle in a baby starts to sink in, the eyes look dry and sunken, lethargy, and eventually death.

PREVENTION

1. Replace the water as soon as the diarrhea begins. Add SUGAR and a little salt to make an **Oral Rehydration Solution or ORS**. See illustration on next page.
2. Continue as long as the diarrhea, vomiting or excessive sweating lasts. Give one cup of ORS for every stool. Continue until the diarrhea stops.
3. If the person is vomiting, give only a sip or a spoonful every few minutes. Add a small amount of juice to the ORS to make it taste better- especially for children.
4. You can give rice water (Add extra water when cooking rice so water is left over after the rice is done), coconut milk, fresh squeezed fruit juice as well. Avoid sodas, sweet drinks, alcohol and coffee.
5. If the person is still dehydrated because they cannot take in enough liquids or are having lots of vomiting and diarrhea- seek medical care.



ORAL REHYDRATION STEPS

ILLUSTRATION: PG 22 & WORKBOOK PG 6

- 1 One Liter of clean water in a clean container
- 2 8 tsp of SUGAR, or a palm-full.
- 3 ½ tsp of salt or a pinch.
- 4 Mix together
- 5 Add fruit juice to make it taste better if you have it.
- 6 ALWAYS TASTE!!! If it is saltier than a tear, throw it out and start again. Do not try to dilute it. If the solution is too salty, it can kill the person who is dehydrated.
- 7 Give the sick person the ORS until they stop vomiting or having diarrhea.
- 8 Continue to breast feed babies!
ORS can also be given in little sips from a clean cup to babies, especially if the baby is sick and not nursing well. But the breast milk is the best thing for the babies.
- 9 Seek medical attention if the person cannot keep the ORS down, if the diarrhea is fast and a large amount (as it is in Cholera), if they vomit most of the fluids they drink, or if the person is not getting better.
Continue to try to give them ORS even while traveling to a clinic.
- 10 WASH your hands before and contact with a sick person to avoid getting sick or passing on the sickness with your hands.

LESSON 9: SANITATION-TRASH

TRASHY DRAMA

Draw two identical houses on a piece of paper or on the ground.

Characters: fly, insect, and rats(s).

Narrator:

Once there lived 2 families.

One was the messy family. These people threw their trash out the window. They threw their dirty water out the front door.

One was the clean family. They buried their trash, and poured out their dirty water away from the house and water source. In the same neighborhood were three hungry families... the flies, the insects and the rats.

The flies buzzing around and said “we are looking for a good home with lots of garbage and rotting stinky stuff. Especially poop! When we walk around on the garbage, fly over to the food, land on the hands and faces...it makes us so happy.

The Insects said moving their antennas and 6 legs in excitement, “I am looking for a nice new home to raise a big family. Now where can I find some good rotten and stinky stuff?

The rats said, wiggling their noses and flicking their tails happily said “Let me come too! We can find a place for all of us to live together, eat, poop, and spread disease”. So off they went. First, they went to the clean family’s house. The flies buzzed sadly. “Nothing to eat here!” The insects’ 6 legs drooped in disappointment. “Nothing to eat here!” The rats wiggled their whiskers and flicked their tails angrily “Nothing to eat here!”

Then they went to the messy house. When they saw the trash, they all danced merrily together in their own way shouting ‘Hurrah!! We have found a great place to raise our families.... our big families! We can have hundreds, thousands of children here!’

THREE QUESTIONS

1. What did you see?
2. What does it mean?
3. What can be done about it?

DEFINITION

Ask: What is trash? Give some examples.

Trash is rotting and decaying material. This is a place where microbes love to grow and where insects and other pests, like rodents, can feed and multiply.

CAUSATION

Ask: What is the problem with trash?

If trash is near the house, microbes on the trash, insects, pests can get on our hands and into our mouths. Free standing water in trash is where mosquitos can breed and spread disease- like dengue fever. Rotting trash contaminates drinking water. All of these make us sick.

SIGNS & SYMPTOMS

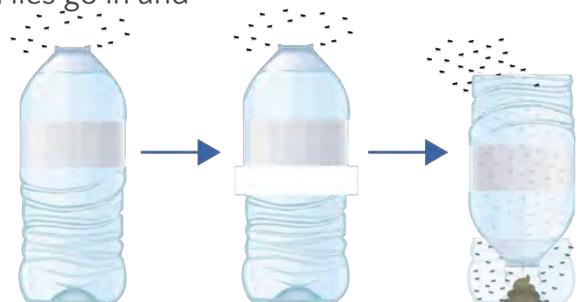
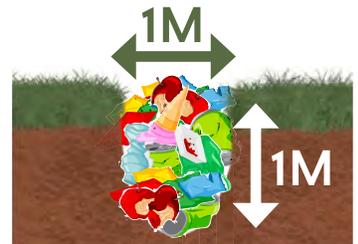
Ask: What are some health problems that can come from trash?

Diarrhea, vomiting, abdominal pain, eye disease, skin disease, diseases from mosquitos like malaria and dengue. People can injure themselves from sharp objects in the trash.

PREVENTION

Ask: How can we prevent disease that is caused by trash?

1. Bury trash away from the house.
2. Don't burn trash, except paper. The fumes can be dangerous to breathe and make our breathing air stink.
3. Bury or store trash at least **100m** from water sources.
4. Separate organic matter from inorganic matter. The organic can be used to fertilize the plants you grow. The inorganic should be buried.
5. Make the hole **1m deep, 1m wide**. When the trash is 5cm from the top-cover completely!
6. Make a fly trap if there are a lot of flies because flies carry diseases. Cut a bottle in two, invert, and hang with smelly bait inside. Flies go in and cannot escape. Works well when there are lots of flies.



LESSON 10: FOOD CONTAMINATION

OPENING ACTIVITY: DISCUSS ILLUSTRATION, WB PG 8

THREE QUESTIONS

1. What do you SEE?
2. What does it mean?
3. What can we DO about it? From this picture, how could food contamination be prevented?



HOW TO AVOID FOOD CONTAMINATION

- 1 Wash hands before touching or preparing food.
- 2 Clean all food preparation surfaces with very hot water and bleach water-6 drops of bleach in a liter. Allow to dry fully.
- 3 Clean all knives, plates, cups and utensils with hot soapy water. Rinse well and dry in a clean place.
- 4 Keep meat juices away from other food. Meat needs to be eaten fresh, well cooled, preserved in a safe way, or put in a refrigerator at <4 degrees C. Clean all surfaces that have had meat on them with bleach water. Wash all tools that have touched meat with bleach water.
- 5 Always cook meat, fish, sea food, and eggs thoroughly.
- 6 Brains can carry disease in some areas.
- 7 If cans are swollen, dented, or leaking- do not use them! Microbes in cans can kill.
- 8 Wash or rinse vegetables and fruits with clean water. Peel them if you can. If any feces- animal or human- have been near or in the garden- wash all fruits and vegetables with bleach water.
- 9 Keep animals out of the garden and the kitchen.
- 10 Store grains and other foods in protected areas without pests or moisture.
- 11 Wash dishes and put them on a drying rack up high in the sun to dry. Store all utensil, plates, pots and pans in a place free of dust and pests.
- 12 Don't eat spoiled or rotten foods.
- 13 Cover foods to keep flies off.
- 14 Fix any leaks over the food storage areas.
- 15 Don't let food sit out for more than 1 hour.
- 16 Always boil any unclean water for 1 minute (rolling boil) before cooking with it.

LESSON 11: HANDWASHING DEMONSTRATION

HANDWASHING DRAMA

The following demonstration can be preceded by a drama in which normal daily tasks have made people's hands dirty—cleaning fish, washing a baby's bottom, taking care of animals, going to the latrine, etc.

Supplies

Glitter or soot, 3 basins, 2 bars of soap, pitcher of water and 4 demonstrator participants. Set out the basins and soap, have the pitcher of water ready.

Demonstration:

Apply glitter generously to slightly damp hands of the 4 participants. Explain to the whole group that the glitter REPRESENTS microbes (but is not microbes!).

Participant number one just wipes their hands on their clothes. Show glitter still on hands. This represents that there are Lots of microbes still on the hands.

The second participant swishes their hands in water. Show glitter on hands....

The third participant uses the soap and swishes the hands in the water. There are fewer but still lots of microbes!

The last participant uses a new bar of soap (the glitter is messy on the other bar of soap) and running water.

The glitter is gone!

THREE QUESTIONS

1. What did you SEE?
2. What does it mean?
3. What can we DO about it?

TEACHING POINT: Use running clean water and soap to remove harmful microbes from hands.

DEFINITION

Ask: It feels good to be clean—are there other benefits?

Hygiene is keeping yourself clean. This prevents harmful bad smelling bacteria and other microbes from causing illness. These microbes can be carried to the mouth, nose and eyes of a well person. A person who cleans smells better and is more pleasant to be with.

CAUSATION

Ask: What causes sickness from poor hygiene?

Our bodies have many microbes. They live many places like on the skin surface and in the gut. Some of these are harmless but some are very harmful. Microbes are very small and can be seen by a microscope, which is a special instrument like a powerful magnifying glass. Microbes can also be seen when they grow into large communities on the surface of a culture plate or a piece of bread. There are 5 kinds of microbes— fungus, parasites, bacteria, viruses, and prions—the smallest of all.

SIGNS & SYMPTOMS

The microbes on our hands can get into our mouths and cause diarrhea, vomiting, abdominal pain, fever, dehydration, sometimes blood in the stool, rashes, respiratory illness, and more serious problems that can lead to death. They can get into our eyes and cause infection and harm.

PREVENTION

Ask: What can we do to prevent microbes on our bodies from making us smell bad and become sick?

1. Clean running water to wash our hands!
2. Soap and rubbing also helps to kill microbes on our hands and skin, as the water rinses the microbes away.
3. Wash hands for 20 seconds.
4. If the nails are dirty, clean under them before eating or preparing food.
5. Everyone should be able to bath the body with running water, soap in a private safe place. This is especially important for women during menstruation.



See tippytap.org for more information

DEFINITION

A Tippy Tap is a simple way to wash hands with running water. It can be constructed from easy to find items and conveniently placed outside the latrine and by the kitchen.

ITEMS NEEDED

A place to hang the water container, if it has no handle, and the soap; a string or rope to hang the soap; a container that holds water such as a jug or a 2 Liter bottle or gourd; string or ropes to hang the water container if it has no handle, and to attach the foot pedal to the container; some way to put 2 small holes in the container- one to let the water out and one to let the air in.

See the drawing from tippytap.org for further information and examples.

STEPS

1. Make 2 small holes in the water source
2. Hang the water source
3. Hang the soap close to the water source
4. Attach the foot pedal to tip the water container so that water comes out.
5. Wash hands by thoroughly wetting hands, washing with soap for 20 seconds, rinsing, and drying. Air dry is good.

Maintain the Tippy Tap!

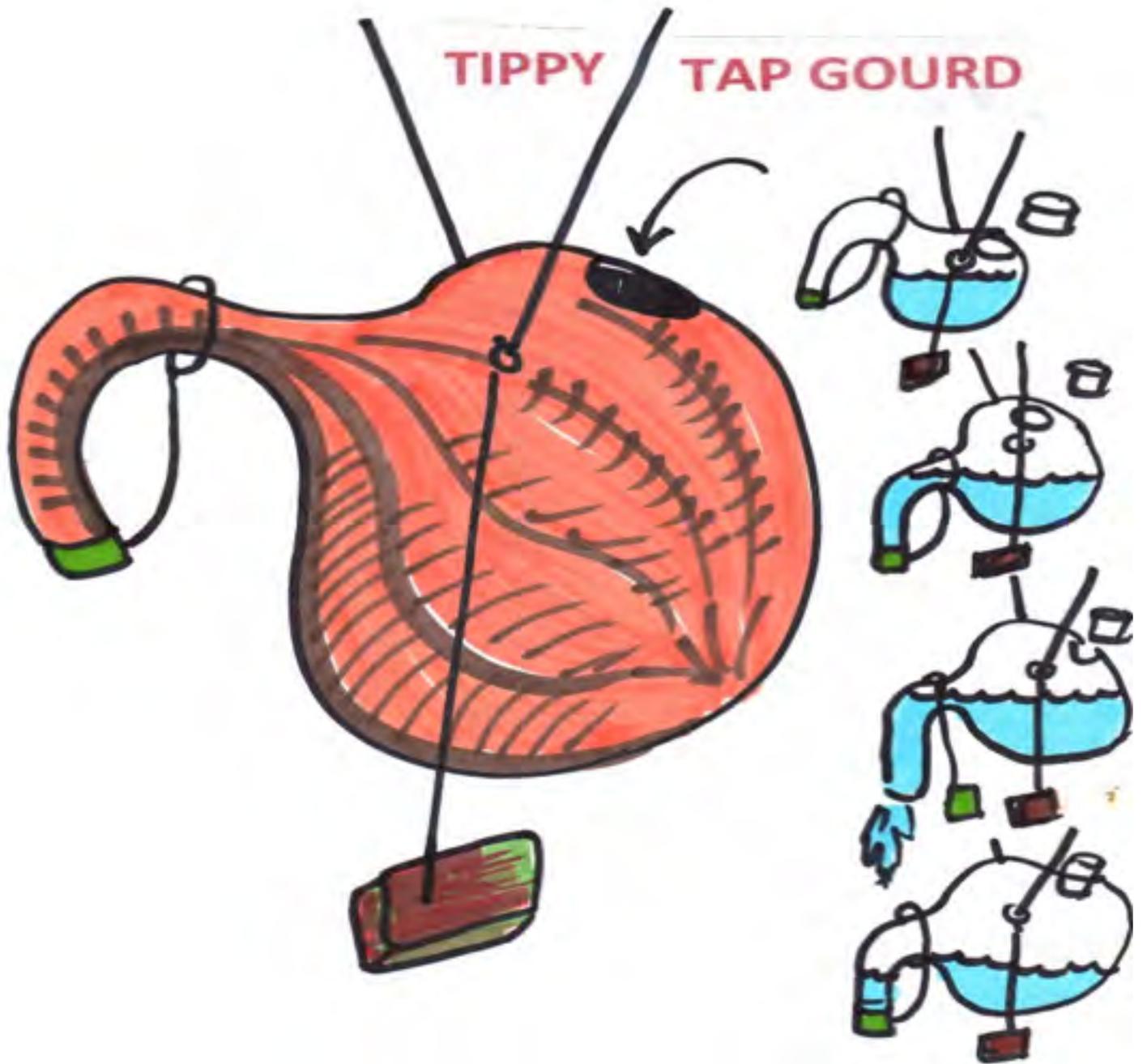
Ask: What are some ways that they Tippy Tap can be useless in killing microbes on hands and preventing disease?

It's of no value if not used. Someone should be designated the responsibility to see that the container is always filled throughout every day. Parents should model how to use it and teach their children when and how to use it.

EXAMPLES OF WATER CONTAINERS FOR TIPPY TAPS: 1-2 LITER BOTTLE



GOURD, WITH TWO HOLES AND TWO PLUGS, AS TIPPY TAP



LESSON 12: NUTRITION

OPENING ACTIVITY: USE ONE OR BOTH ACTIVITIES

ACTIVITY 1

Do a Ten Seed Technique (*Review Renew Health Toolkit Booklet 1, Lesson 9*).

ASK: “What foods do you eat?”

ASK: “What foods do you eat the most of?” Give the group ten seeds.

Have them put more seeds on the groups they eat the more of. Discuss. Identify the three food groups already in their diet. Using the following page, describe the 3 food groups which everyone needs to be healthy and ask how it compares with their diet.

ACTIVITY 2

NUTRITION DRAMA: The four Brothers

Select four actors to be the four “brothers”. Meet with the actors for a few minutes to prepare them. Narrate the story while they enthusiastically act it out.

The **red brother** eats red foods–**PROTEIN!!!** “I am sooo strong, I have big muscles. I can lift heavy things and grow tall. (Shows off muscles!) But I sometimes get sick and do not have much energy.” (coughs, looks tired)

The **yellow/green** brother eats colorful foods–**VITAMINS and MINERALS!!!** “I eat lots of colorful fruits and vegetables and I feel good! I do not get sick often because I have a healthy immune system. I can see, smell, & hear well. My skin and hair is good.” (Walks around happy and points to eyes, ears, skin/hair) But I do not have big muscles and sometimes am tired. (Show little muscles and looks tired)

The **brown/white/beige** brother–**CARBOHYDRATES!!!** “I have lots of energy!!” (the person runs around, jumps and twirls.) “But I am not strong, not very tall, and get sick pretty often.” (Shows little muscles, and coughs)

The 4th brother – “I eat some of all the colors! I get proteins, vitamins and minerals and carbohydrates! I am strong!” (Shows off muscles with the strong red person & struts around looking and seeing and pointing to hair and skin with yellow/green person). “I have lots of energy too.” (Runs and jumps and twirls with the carbohydrate person.) “I get all the nutrition my body needs to be healthy.”

THREE QUESTIONS

1. What do you see?
2. What does it mean?
3. What can we do about it?

BRAINSTORM

Brainstorm with the group on what modifications in the current diet would introduce all the food groups to their community. This would be especially important to address for the children. Include discussion of breast feeding and weaning to a diet with all the food groups.

DEFINITION

Good nutrition requires having *all of the different kinds of foods* your body needs to be strong and healthy. Poor nutrition is not having enough to eat, or eating only some of the necessary kinds of food.

There are different kinds of malnutrition depending on what is missing in the diet -carbohydrates, proteins, vitamins, or minerals. In children between ages 1 and 5, having a midarm circumference (half way from elbow to shoulder) of less than 11 cm diagnoses serious malnutrition.

CAUSATION

Your body has many different kinds of cells- muscle cells, brain cells, heart cells, blood cells, and so on.

Each of these cells need a variety of fuels (like petrol is a fuel for motors) to **go, grow and repair** themselves. This is especially true for children who are busy growing! If a fuel is missing, or there is not enough- the body cells do not go, grow or repair themselves well.

There are THREE main kinds of fuel the body needs. These are called *nutrients*.



1. GO! Carbohydrates. These give energy. Rice, yucca, cassava, breads.

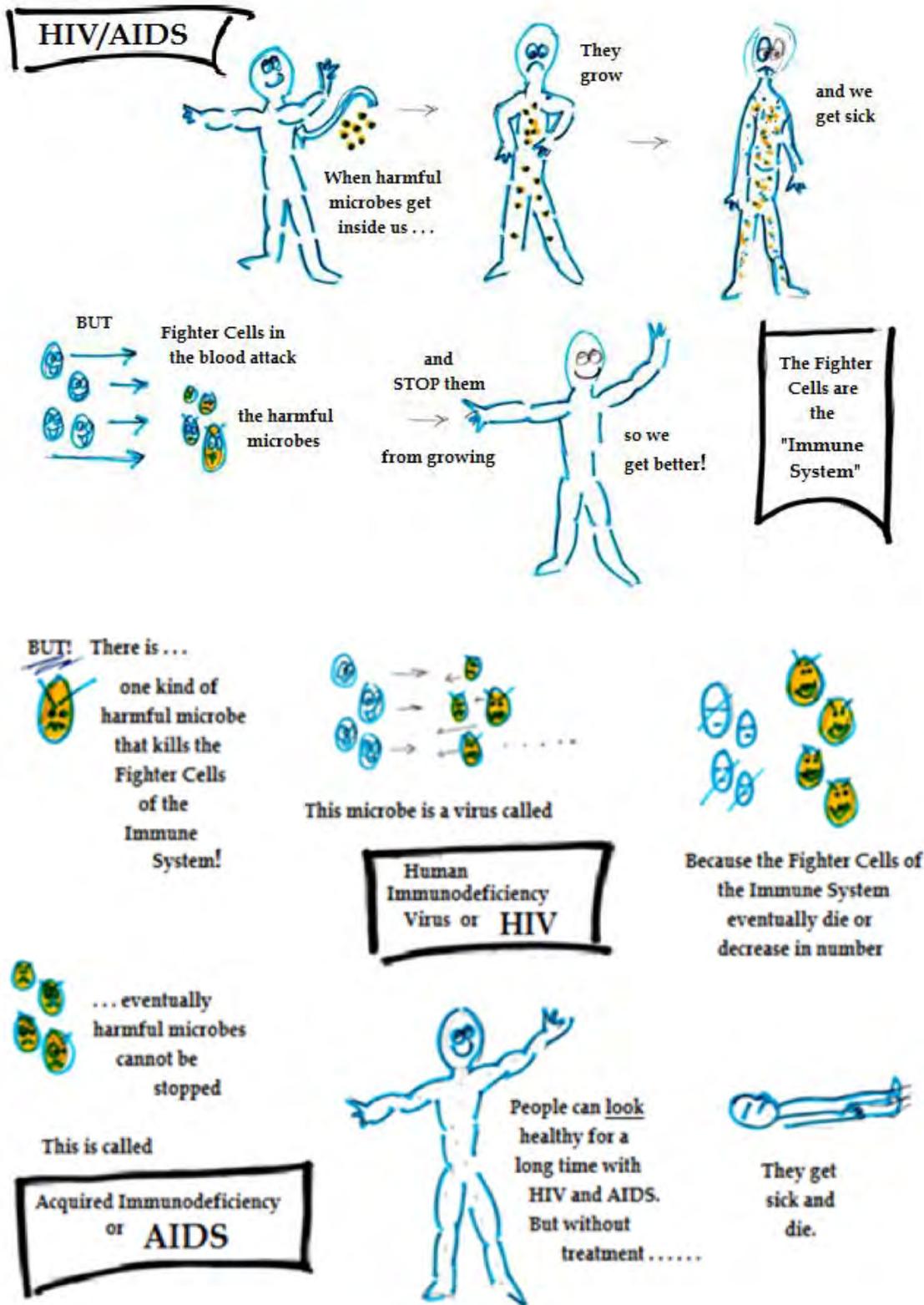


2. GROW! Protein. These include fish, eggs, meat, beans.



3. REPAIR! Vitamins and minerals help our bodies to be healthy and repair itself and fight infection- fruits and vegetables.

LESSON 13: HIV & STI



DEFINITION

HIV stands for Human Immunodeficiency Virus. It is a viral infection that destroys the helper cells of the immune system. The helper cells help fight infection. After about 3 years the person with the infection is no longer able to fight infection and they become ill. This is called AIDS.

CAUSATION

The HIV virus is transmitted by infected bodily fluids– such as semen, blood, and breast milk. The virus passes to an uninfected person through vaginal or anal intercourse, during delivery, or through sharing blood. Blood sharing can occur in number of ways– like using unclean needles. It is not transmitted by kissing or by mosquitoes.

SIGNS AND SYMPTOMS

There are three stages:

1. **THE ACUTE STAGE**–2 to 4 weeks. HIV usually has NO symptoms! A few people may feel a little tired or achy. It is very contagious at this time, and the blood tests do NOT show the HIV infection in the blood yet.
2. **THE LATENT PHASE**–3 years or so. HIV usually has NO symptoms during this time. The person looks healthy and yet is contagious and can be passing the virus on to others without anyone knowing it. Blood tests will show the virus.
3. **AIDS (Acquired Immune Deficiency Syndrome)**–The infection has destroyed much of the helper cells and the immune system is not working to fight infection. The person begins to become ill. Symptoms include frequent infections, cough, chills, sweats, fever, swollen glands, weakness, weight loss, diarrhea, skin diseases and blisters, skin tumors, sore throat, impaired thinking. People with AIDS are very contagious and the blood test will show the virus.

HIV PREVENTION

1. **Only have sex with one person throughout your whole life.** This is God's plan. See the Renew Health Booklet 3 on *Healthy Sexuality*.
2. If you have had sex with more than person, be tested for HIV and only have one partner from now on.
3. Do not share needles or razors or anything that has had blood on them.
4. If your partner has HIV use condoms, and take the HIV medication that prevents HIV transmission. Talk with your doctor about this.
5. Mothers with HIV should take medication to prevent passing HIV on to their children during **delivery**.
6. Mothers with HIV should take medication during the months or years of breast feeding. (NOTE: If there is no medication, and the mother has HIV, the mother *should continue to breast feed* if the infant needs breast milk to survive. Not all infants become infected.)
7. Care givers and health providers should wear gloves when handling blood or bodily fluids in case the blood or fluids are infected.

Other information:

Consistent use of condoms significantly reduces, but does not eliminate, the risk of getting HIV and other sexually transmitted diseases.

Be tested if there is any potential for having HIV because NO symptoms are present for years after a person is first infected.

A person is at a higher risk for getting HIV with a greater number of sexual partners, having sex at a young age, using drugs and alcohol, having other sexually transmitted diseases, anal intercourse, using IV drugs.

Get your health information from a reliable source! False information about HIV has serious consequences because without treatment, the disease is fatal.

HIV & AIDS TREATMENT

8. Seek out a government sponsored treatment program.
9. Medicines to treat AIDS, called antiretroviral medications, do not cure.
10. However, these medications can prevent getting HIV and AIDS from an infected person, prevent transmission of HIV to an uninfected person, and can extend a person's life for many many years.

SEXUALLY TRANSMITTED DISEASES (STI)

STI	Chlamydia	Syphilis	Herpes	Gonorrhea	Genital Warts
Cause	Microbe- Chlamydia trichomonas bacteria	Microbe- Treponema pallidum bacteria	Microbe- Herpes simplex virus	Microbe- Neisseria gonorrhoea bacteria	Microbe- Human papilloma virus
Signs and symptoms	Women- vaginal bleeding and discharge, abdominal pain, fever, pain with urinating Men- watery drips from penis, pain urinating, testicular infection	Three Phases: These occur over time 1. Painless genital sores 2. Joint aches, rash, fever, sore throat 3. Skin, bone, and artery disease	Painful ulcers in the genital area 1. Initial infection with fever, malaise, and blisters 2. Recurrence - varies 3. Some people do not have recurrences	Women- increased vaginal discharge, bleeding, painful intercourse, pelvic infection. Men- Milky white penile discharge, pain with urination, infections of throat, anus, testis, mouth	Warts in the genital area. NOT ALL warts in the genital area have been sexually transmitted
Later problems of not treated	Serious pelvic infection, infertility, life threatening ectopic pregnancy	Dementia, madness, deafness, paralysis, ruptured aorta, chronic pain, death and birth defects in infants	Contagious even before blisters form. No cure. Can be life threatening for infant during delivery	Arthritis, blindness, heart problems. Women can have trouble with delivery and become infertile	Some types of wart virus can cause cervical cancer, which can be fatal if left untreated
Treat these diseases and transmission	Antibiotic cures (early) and reduces symptoms (late)	Antibiotic cures (early) and reduces symptoms (late)	No cure. Medications can reduce recurrences	Antibiotic cures (early) and reduces symptoms (late)	See a health care provider for treatment and to check for cervical cancer.

Prevent these diseases by having sex with only ONE person in a lifetime monogamous relationship. Be checked if there is any risk. Condoms reduce the risk of getting and transmitting an STI.

LESSON 14: DIABETES

DEFINITION

Diabetes is a problem getting glucose into cells. Eating carbohydrates provide the body with glucose. Glucose is the energy fuel for all the body's cells. Insulin is a hormone in our bodies which allows glucose to get into cells. It is like a key that unlocks the door into the cell.

CAUSATION

Type 1 Diabetes is caused when a person's immune system destroys the cells in the pancreas that make insulin. These people have NO insulin.

Type 2 Diabetes is caused when there is not enough insulin or the insulin does not work.

SIGNS AND SYMPTOMS

Symptoms are due to *too much glucose in the blood*. Because glucose is not getting into the cells, the excess glucose in the blood harms the eye, the kidney, the nerves and the blood vessels. Other symptoms are due to cells not having the energy they need to function.

INITIALLY PEOPLE:

1. Urinate frequently
2. Are thirsty
3. Are hungry
4. Eat more food but lose weight.

LATER:

1. Wounds heal slowly
2. Rashes develop in moist areas
3. Vision gets blurry
4. People are tired.
5. Blindness
6. Poor circulation and loss of feeling, especially in the feet
7. Heart disease
8. Strokes
9. Coma and death.

TREATMENT

Type 1 Diabetics need *insulin* injected daily or they will die.

Type 2 Diabetics need a *low carbohydrate diet, weight loss, diabetes medication and occasionally insulin* to prevent long term consequences.

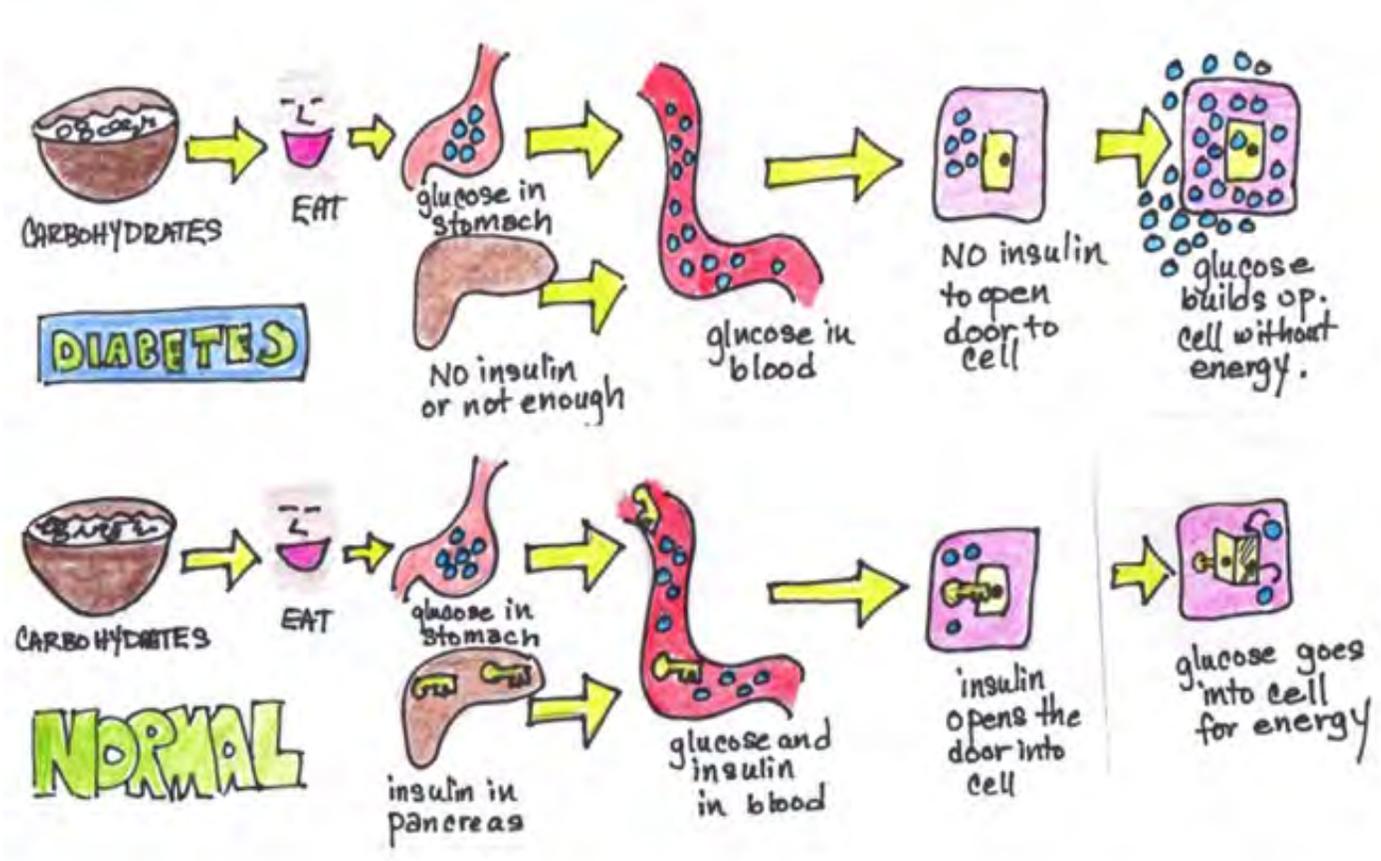
DIABETES ILLUSTRATION

When DIABETICS eat carbohydrates, it becomes glucose in the body. The glucose goes into the blood to bring energy to the cells.

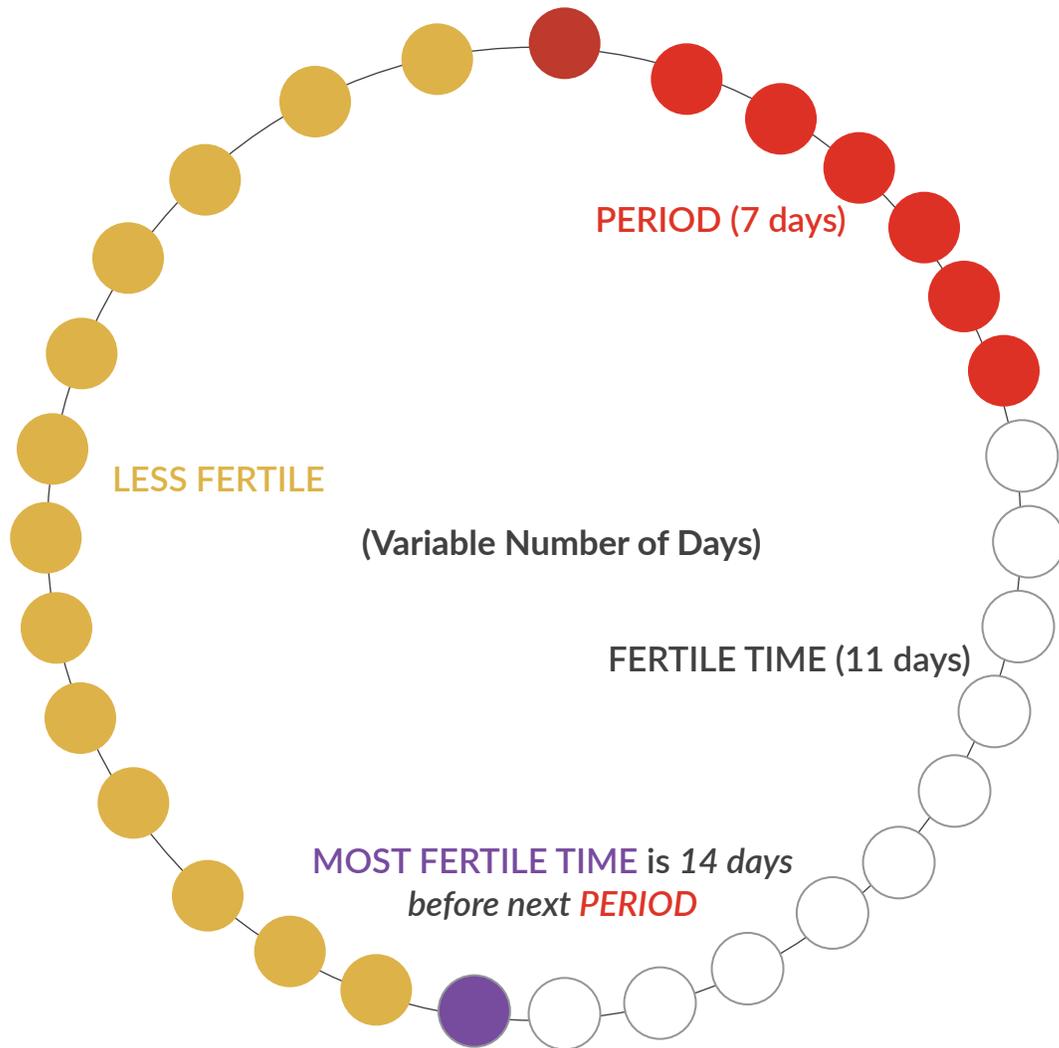
Because there is no insulin to open the door into the cell, the glucose accumulates in the blood and causes damage to the body. Also, Cells do not have the energy they need to function.

When NORMAL healthy people, who do not have Diabetes, eat carbohydrates, the carbohydrates become glucose in our body.

The glucose goes into the blood to bring energy to the cells. Insulin “opens the door” to the cells so the glucose can get inside. The cells have the energy they need.



LESSON 15: NATURAL FAMILY PLANNING (NFP)



DEFINITION

Natural Family Planning (NFP) is the method of using the woman's monthly cycle to plan or avoid a pregnancy. When a woman is fertile, she can get pregnant.

CAUSATION

There are times during the monthly cycle when a woman is MORE likely and LESS likely to get pregnant. A Woman is MOST likely to get pregnant 14 days before the next period. This is when a woman is most fertile because the egg is usually released at this time from the ovary and available for the sperm and fertilization.

HOW IT WORKS

The Woman's Cycle Beads helps a woman track fertility. The **red** beads stand for the woman's **period** time. Her actual bleeding may be shorter (3 days) or it may be longer (**7days**). The **white** beads stand for the fertile time of the month! (11 days) and the **MOST fertile time is 14 days BEFORE the next period**. The **yellow** beads stand for the less fertile time of the month. (Variable # of days)

A woman tracks her fertile and less fertile times by putting a marker every day at the place at the Cycle Bead ring where she is at in her monthly cycle. Intercourse is planned depending on whether a pregnancy is being sought or avoided.

PROBLEMS

1. It works best if a woman has very regular cycles, when the period occurs on the same exact number of days apart every month. Every woman's cycle is unique to her. Normal periods can vary from 21 to 35 days apart, so less fertile days can also vary. Because of this- *NFP does not work for everyone all the time; a woman can still get pregnant using this method!*
2. A woman and her sexual partner have to agree together on when they are going to abstain from or have sexual intercourse. If they have sex during the fertile time, they must use another birth control method at that time to prevent pregnancy.
3. With NFP, a woman having sexual intercourse *is always at risk for getting pregnant*. NFP does not reduce the risk of getting a sexually transmitted disease... it is VERY important to use a condom to reduce the risk of a sexually transmitted disease.

There are many other options for birth control- Condoms, spermicides, cervical caps, diaphragms, hormone treatments, & sterilization. See a health provider. See Renew Health booklet 3-*Healthy Sexuality* for more information.

LESSON 16: RESPIRATORY ILLNESSES

DEFINITION

An infection of the nose, throat or breathing apparatus—bronchiole tubes and lungs.

CAUSATION

When a microbe gets into your mouth or nose, that microbe can make you sick.

Most of these microbes are passed from a sick person to a healthy person by droplets or by passing the microbes by droplets on the hand. The hand then touches the nose, mouth or eyes, transmitting the disease.

There are many different kinds of microbes that cause respiratory illnesses. Some are viruses, which are the most common. Some are bacteria, like tuberculosis, and these can be very serious and even fatal, especially in children. When these microbes go into the throat, nose or the lung, they multiply and prevent the needed air from getting into the body.

SIGNS AND SYMPTOMS

Cough, runny nose, sneezing, watery eyes, fever, trouble breathing— abnormal breathing, shortness of breath, wheezing (abnormal noise with breathing out), stridor (noise with breathing in), fatigue, thirst, not hungry, lethargy.

With serious respiratory infections, people may turn blue, feel like they cannot breathe, get too tired from breathing, stop breathing— coma and death can follow.

PREVENTION

1. Wash your hands frequently when you, or someone you have contact with, are coughing or having other symptoms of a respiratory infection.
2. If you are coughing, stay away from other people.
3. ALWAYS cough into the “**coughing place**”— the inner elbow. Teach this to your children!
4. Stay away from smoke, because it damages your breathing tubes and lungs. Smoke also makes you vulnerable to infection and cancer.
5. If you wipe your runny nose with your fingers— always wash hands right away.

Remember— you do not get colds from being cold, but from people who are infected and from droplets.

RESPIRATORY DEMONSTRATION

DEMONSTRATION 1:

Have a bottle of perfume. Spray it around the room.

ASK: Can you smell it? Can you see it?

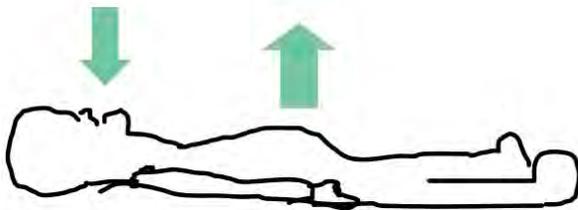
The fragrance is carried on tiny “droplets” to your nose. In the same way small microbes are carried on the droplets of a person who is coughing, sneezing or has grippe. If these microbe-carrying droplets from the sick person get into your nose or mouth or eyes, you will get sick.

DEMONSTRATION 2:

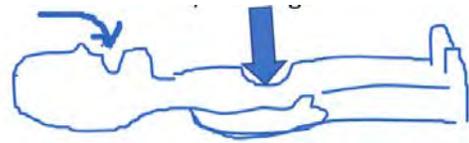
Have everyone lean back on their chair or lie down with their hands on their stomachs to notice this about their breathing.

Signs of **normal** breathing. When you breathe IN, the stomach should go OUT.

Sign of **abnormal** breathing. When you breathe in if the stomach goes IN, the person is in trouble, working too hard to breathe. Seek medical help.



NORMAL BREATHING



ABNORMAL BREATHING

COUGH DRAMA

Have 4-5 people stand in a line.

The first person **PRETENDS** to sneeze at person 2 (or pretend sneezes into their hand and shakes the hand of the next person).

Person 2 gets sick and sneezes at the next person (or sneezes in their hand and shakes the hand of the next person) ... and so on down the line.

The second to the last person sneezes in his inner elbow and the last person smiles and walks away—**NOT** sick.

THREE QUESTIONS

1. What did you SEE?
2. What does it mean?
3. What can we DO about it?

LESSON 17: HIGH BLOOD PRESSURE

DEFINITION

High blood pressure is too much pressure in the blood vessels when the heart is pumping (top number) and when it is not (bottom number). This pressure is hard on the blood vessels, the heart, and organs like the brain, kidney and eyes.

CAUSATION

The cause is unknown- but high blood pressure is more common in people as they age, gain too much weight, smoke, if they have high blood pressure in other family members, eat too much salt, do not exercise, drink too much alcohol, and if they do not eat enough fruits and vegetables.

SIGNS AND SYMPTOMS

There are often NO symptoms of the blood pressure itself- but there are symptoms when the affected parts of the body are damaged. High blood pressure leads to heart attacks, strokes, kidney failure and other serious even fatal problems.

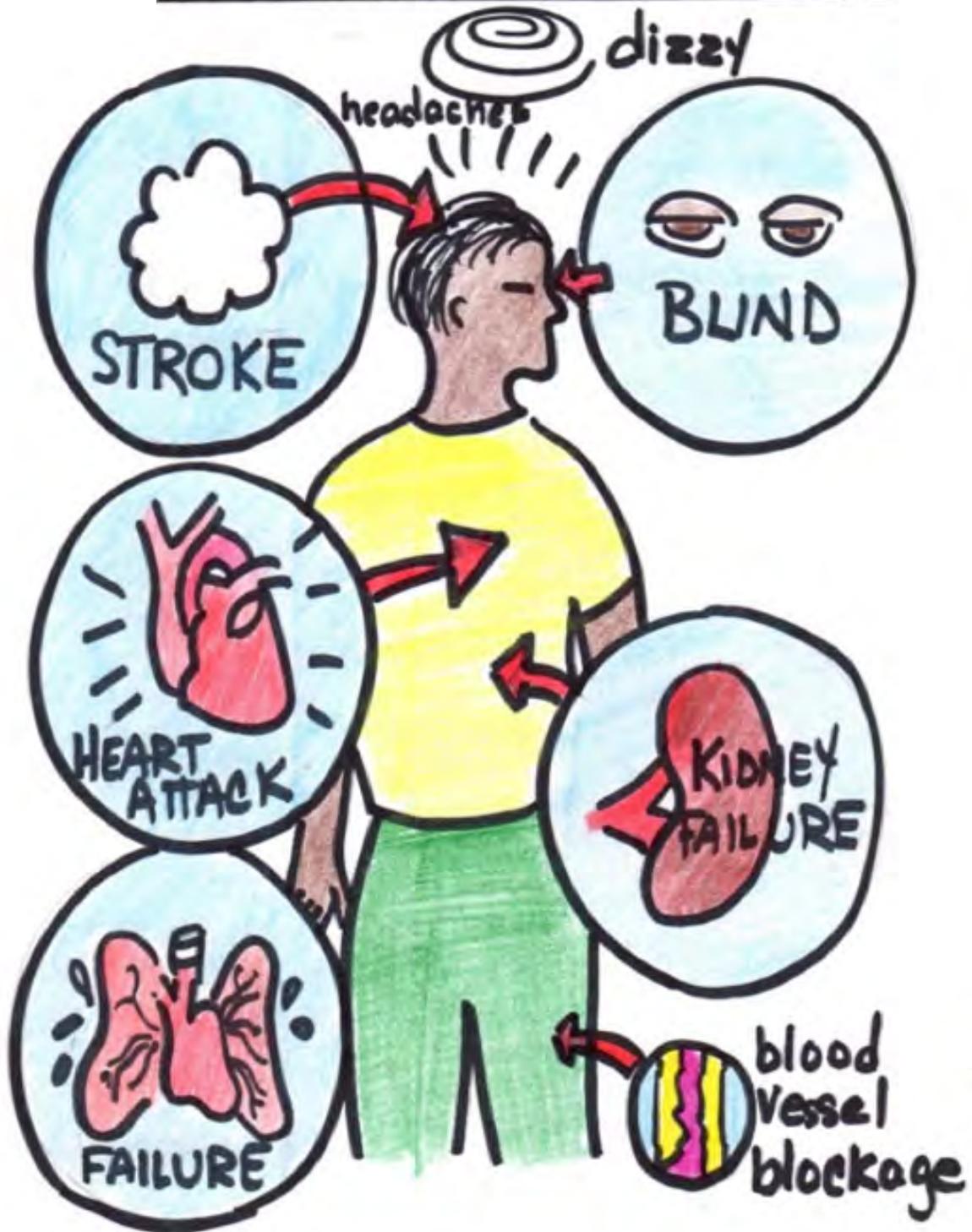
PREVENTION

See a health provider to check your blood pressure. The health provider can also help you stay healthy and feel good. Take care of yourself- Eat healthy foods, get regular exercise, do not get overweight, decrease daily salt in food, STOP SMOKING, try to avoid inhaling smoke from fires, drink only small amounts of alcohol, get plenty of sleep (7-8 hours a night).

TREATMENT

Medicines are often needed to control blood pressure and prevent the serious consequences of ongoing high blood pressure.

HIGH BLOOD PRESSURE



LESSON 18: ADDICTION

OPENING ACTIVITY: TWO POTENTIAL STARTERS FOR ADDICTION INTRO & DISCUSSION

THE DANGEROUS LIZARD STORY

CHARACTERS: The Person, the friends and family, the village wise man; the egg/dragon can either be imagined, a puppet, a person costumed or someone just acting the part.

Select actors & meet with them for a few minutes to prepare them. Narrate the story while they enthusiastically act it out.

NARRATOR

The village wise man warned the village not to have anything to do with the lizards or their eggs because they are dangerous and deadly!

The Person is sad and lonely. Many of the Person's friends have eggs or small lizards and most seem to be doing fine. A few people look like they are getting into trouble with their lizards- some even killed. The friends with the small lizards say "that will never happen to us." His friends take him to the valley or place of the eggs. For a small fee they promise him a little lizard will make him feel good, help him forget his troubles. The Person finds an egg. It is beautiful. The Person knows that they should not but-decides to bring the egg home anyway. The Person is obsessed with the egg and with the beautiful little lizard it produces. The Person is always thinking about it and anticipating the next time they are together.

The little lizard is so cute, so pretty, it snuggles up to him, it does little tricks, it makes him laugh. The Person feels less sad or lonely. The lizard gets bigger. It needs to eat. The Person has to hunt and look for food to feed it. The lizard's appetite soon becomes huge. It takes all day to find food for the lizard. Soon the Person cannot go to school, work, take care of their children, take care of themselves. The Person becomes sick.

The Person's family become worried. They tell the person that the lizard is a problem. But the Person is in denial. He becomes angry with them. The Person lies that the lizard is in the house. He hides it. He steals from his family, friends and neighbors to buy food for it. Sometimes he robs and hurts total strangers to get money to buy food. He ignores the big poop on the floor and the lizard's presence. When the family talks about it, the person accuses others of making it up and has many excuses for keeping the lizard. Sometimes the person hates the lizard. He promises the family he will get rid of it but he can't and the lizard will not let the person go. It gets so large. It has big teeth, it has sharp claws, and is always very hungry. It eyes the person and licks its lips

THREE QUESTIONS

1. What did you SEE?
2. What does it mean?
3. What can we DO about it?

BIBLE STORY: LAZARUS

BIBLE STORYING: John 11:1–44, Lazarus. Act it out.

THREE QUESTIONS

1. What did you SEE? 2. What does it mean? 3. What can we DO about it?

SPECIFIC QUESTIONS

1. Did Lazarus hear the call to come from death into life? (Yes, and we are called from death into life when we begin to follow Jesus. We were dead in our sin but now have been 'made alive in Christ' Ephesians 2:1 In baptism we left the 'old man' in the water and are now 'new creations', new and alive.)
2. What was he still bound by? (John 11:44- the grave clothes.) We also need to be 'unbound' to be free of the grave clothes of old ways of thinking, behavior and habits.
3. How can we prevent being bound by lies and habits that lead to addiction and help our addicts get free from addiction in our community? (What do we want to see happen in our communities, what help do we need, how can we begin?)

DEFINITION

Addiction involves continuing to engage in behavior that temporarily satisfies a need, but permanently hurts.

It involves denying the extent of the problem and an inability to control the behavior—even though the behavior causes serious problems for the person, the family and the community. With addiction to many drugs, often higher doses are needed to get the temporary satisfaction. This is called *tolerance*. When the substance is not available there is a period of, often painful or fatal, *withdrawal*.

CAUSATION

The behaviors of addiction provide temporary relief from pain and or a pleasurable sensation in the brain.

One way to describe the brain is a place where messages are received and sent. The brain cells are called NEURONS. They are connected to one another, and to the rest of the body, in order to transmit messages of thought, emotion, physical movement and sensation. Drugs and excess alcohol damage the brain. They mix up the neurons' connections and pathways so that the brain is not able to perform its necessary functions. If the brain does not function, the person does not function.

DRUGS

At first, *taking drugs numbs the part of the brain that feels pain or excites the part of the brain that perceives pleasure.*

Finding and taking the drugs eventually dominate behavior, relationships and other priorities... with dire consequences. With some drugs the pleasure center of the brain 'burns out' so that nothing is enjoyable, even more drugs, without higher and higher doses. An addicted person craves that initial experience above all else, and this can lead to death by overdose. Drugs promise pleasure, but fail to deliver. See Renew Toolkit Booklet 3 *Healthy Living: Addiction Free* for more information.

ALCOHOL

Alcohol *relaxes and numbs a person's pain.* With prolonged use and at higher doses, alcohol permanently destroys neurons. It is especially poisonous or toxic to the growing brains of children, and babies. Babies born to drinking mothers are born with brain damage from which they may never fully recover.

SYMPTOMS

DRUGS

Symptoms of drug use depend on the drug and the dose.

Some drugs subdue, some drugs excite. Some drugs alter perception of sight, sound, hearing and sensation. Drug seeking behavior may result in violence, illegal activity, and neglect of important life activities and functions. With ongoing use—intellectual, psychological and physical problems develop.

ALCOHOL

Symptoms of **acute excess** alcohol include red face; trouble with walking and balance; slurred speech; excitability and increased emotions; sleepiness and vomiting; agitation and disorderly conduct including violence, loss of social inhibitions, poor judgement; depression, confusion and coma. **Drinking too much alcohol at one time** leads to alcohol poisoning, which can be fatal. Neuron destruction results in blackouts, which are periods of time that the person will not be able to remember what happened. During that time, the addict or alcoholic may have participated in dangerous or harmful behaviors they later do not remember. At any amount—fetal, baby and baby and children's brains are vulnerable to permanent damage from brain poisoning.

With ongoing excessive use—life threatening and permanent brain damage occurs. This affects thinking, learning, memory, and coordination. Damage to other parts of the body, such as the liver, lead to altered sleep; changes in personality; anxiety and depression.

Chronic excess alcohol use can lead to high blood pressure, heart disease, coma and death. Alcohol seeking behavior can also result in violence, illegal activity, and especially neglect of important life activities, relationships, and functions.

PREVENTION

Engage the community in discussion. Find the lies that motivate people to seek drugs and alcohol in the first place. Destroy the lies and replace them with truth that sets people free (John 8:32). Take action to address local contributing causes of alcoholism and drug use. You can use a Ten Seed technique to ask the community why people drink too much or use harmful drugs. The Solution Grid can be used to come up with potential solutions. Both the Ten Seed technique and the Solution Grid are in book 1.

TREATMENT

Principles of treatment address **physical, psychological and social** aspects of addiction.

Physical problems associated with drug use and alcohol addiction need to be addressed by a health care provider. For example, medications can help ease the pain of withdrawal, treat contributing underlying physical or psychological problems, treat thiamine deficiency which causes serious health consequences, stop death from overdose (Naloxone), help prevent alcohol use by a medicine that causes unpleasant side effects (Antabuse), etc. For certain drugs, using a substitute drug that is safer and allows a person to function is effective.

Psychological and Social aspects are addressed in a number of ways. Traditional group approaches, primarily to alcohol addiction, focus on these ideas:

1. Because denial is part of addiction, the addicted person must in honesty acknowledge their addiction, recognize its dire consequences, and stop using.
2. Because personal control and powerlessness are part of addiction, the addicted person must in hope surrender to “a higher power” for the power for a successful recovery.
3. Because self-absorption and social isolation are part of addiction, the addicted person must walk out recovery in community.

These are often done in conjunction with family, friends, and counseling. There are successful secular therapies (MET, family therapy, cognitive-behavioral therapy, etc.) and Christian therapies (Celebrate Recovery and Celebrating Liberation, a CONPLEI ministry.)

Addiction treatment consists of a good personal and professional support network who can walk through the ongoing process of becoming free from addiction.

See Renew Health Booklet 4–Healthy Living: Addiction Free.

Other Scriptures to read in context, discuss, & meditate on: John 8:32, Galatians 5:1, Galatians 2:16, John 10:10, Philippians 2:13, James 5:16, Hebrews 10:22–25, 1 John 1:9, Luke 6:31, James 4:7, Colossians 3:1–17

Renew Health Promotion
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