

## **Health Education**

### **4 Week Programme of Teaching Ladies in the Village – August 2007**

#### **Elaine Boyd**

Week One – Nutrition

Week Two – First Aid and Malaria

Week Three – HIV and Sexually Transmitted Diseases

Week Four – Blood Pressure, Asthma, Family Planning

Week Five (2 Additional Days) – Clay Oven Demonstration and Cooking Demonstration

### **Week One – Nutrition**

- Nutrition means eating enough of the right sorts of food.
- Malnutrition means either eating all the wrong foods for the body or not eating enough food.
- There are 5 basic food groups
- A good nutritionally balanced day of food should include food from all the groups.
- Any change that is introduced into a diet should be made in small, manageable steps.

#### **1. Carbohydrate (Energy Foods)**

This food gives you energy to work, to carry water and wood etc.

Ask the ladies what food they think comes under this category.

- a. Cassava
- b. Yam
- c. Rice
- d. Maize
- e. Beans

#### **2. Protein (Body Building foods)**

This helps with the growth and repair of the body.

- a. Fish
- b. Eggs
- c. Nuts
- d. Beans
- e. Groundnut powder

If there is not enough carbohydrate eaten then the protein will be used for energy and will not be useful for growth.

#### **3. Fruit and Vegetables**

These give you all the vitamins and minerals that your body needs to be healthy – eat as much fruit and veg as you can and as often as you like.

- a. Mango
- b. Banana
- c. Paw Paw
- d. Oranges and Lemons (and note that they asked if lemons thinned your blood as they had been told this and many of them didn't eat them because of this!)
- e. Cassava leaves (and any other green leaf)
- f. Sweet Potato
- g. Avocado
- h. Tomatoes
- i. This list is endless but talk around the main ones that are available in that area.

#### **4. Fats and Sugars**

It's good to eat a little of this when you can but eating too much causes other health issues.

- a. Cooking Oils
- b. Margarine
- c. Avocado (explain this is a good fat and you want to eat this when you can)

#### **5. Milk and Dairy**

Good for calcium

- a. Milk from cows and goats
- b. Yogurt
- c. Cheese

Explain how much you should eat of all these groups.

### **Vitamins and Minerals**

Vitamins and Minerals found in some foods help keep the body healthy.

#### **Vitamin A**

Helps to have good eye sight and to prevent night blindness.

Get this from:

- Eggs, meat and milk
- Dark leaf vegetables e.g. cassava and sweet potato leaves
- Yellow and orange fruits e.g. mango, paw paw, sweet potato

#### **Vitamin C**

Helps to fight disease and illnesses.

Get it from:

- Most fruits but especially lemons and oranges
- Banana and plantain
- Dark green vegetables, including leaves

Don't overcook the vegetables or you kill the vitamins.

You can use the water that you have cooked the vegetables in in a stew or something, that way you still get the vitamins from the water. (Note: Cassava leaves should be cooked as they are taught for many hours to kill the poison.)

#### **Iron**

This helps to carry the blood around the body.

Very important for pregnant ladies and the growth of the fetus.

The more blood you lose the more iron you lose.

Get it from:

- Meat (esp. liver and insects, e.g. lake fly)
- Fish
- Eggs
- Green Leaves
- Beans and peas

#### **Calcium**

Helps to build strong bones, teeth and nails  
Especially important for younger children and older people.

Get it from:

- All milk produce
- Some fresh water fish and the small fish with bones.

The ladies asked how they can get some of the things, e.g. Iron from meat when they cannot get access to meat. Explained what a vegetarian is and how they cope without ever eating meat so that it's not a necessary thing in the diet.

This topic seemed interesting to some but not to others, think it really depended on what they already knew (some ladies knew it all but others knew nothing).

### **Food Storage and Hygiene**

- Ensure food is stored in a clean and dry place, high up away from rats and ants.
- Keep food covered away from flies.
- When preparing food wash your hands first.
- Ensure surfaces you are working on are clean

General discussion around this matter.

## **Week Two – First Aid**

### **Burns**

First asked them what they did if someone was burnt. They generally did not a lot or used paraffin or eggs on the burns.

<b>Minor Burns</b>	<b>Major Burns</b>
Skin is not broken	Skin is broken
Skin is red and swells and is sore to touch	Skin is red raw and will blister
Apply or submerge burn in cold water for 20 minutes	Do not remove material or clothing from the burnt area of skin
Do not cover	Cover burn with egg white or honey
Keep clean	Then cover burnt area with non-sticking product to keep clean (a banana leaf might work well)

### **With All Burns:**

- Do not use fats or oils on burns
- Always keep burnt area clean. All burns can get infected if they become dirty which will cause serious problems.
- Never apply other creams to the burn
- Never play with blisters or the burnt area.

Note: Paraffin may work as a cold liquid to treat the burn but please note that it's flammable.

### **Clothing on Fire**

- Movement will encourage the fire to grow quickly

- Wrap person in blanket and roll them along the ground quickly
- Douse person in plenty cold water
- Treat person for any burns they may have

## **Bleeding and Cuts**

### **Minor Cuts and Bleeding**

- Wash your hands before you treat anyone, if you have dirty hands you can infect the other persons wound
- For adults clean wound with salted water – this will sting but it’s very effective to clean a cut. For young children this might be too painful so just use clean water. To clean water boil it and let it cool.
- Ensure that all small objects such as sand and grit are removed from the cut.
- With clean material apply pressure to the wound. (I actually showed them what I meant by pressure so as they knew it had to be firm). I suggested that they kept in a clean plastic bag pre-sterilized pieces of material in case of emergency)
- Raise wounded area about heart level to help stop the bleeding (I showed them a picture from a first aid book with someone with a cut on their leg, i.e. lie them down and support their leg while its raised and apply the pressure at the same time).
- Once bleeding has stopped cover with clean material
- Do not let cut get dirty, keep clean and covered.
- Do let the cut “breathe” when you are resting – air helps the cut to heal.

### **Major Cuts and Bleeding**

- Main aim is to try to stop the bleeding so as they don’t loose too much blood.
- Clean wounded area.
- Apply pressure and raise wound above heart level.
- They will need medical attention if the cut is very serious, and loosing too much blood is dangerous.

All wounds even small ones can get infected so its important to always use clean water, clean materials and to keep wound clean. Infected wounds will need medical attention.

## **Diarrhea**

People who suffer from diarrhea loose a lot of water, salt and sugar. Therefore you need to replace these things back into the body so ensure it’s strong enough to fight the illness causing the disease.

- 500ml (one plastic bottle – all given one bottle to measure) clean water (boiled and cooled)
- 4 teaspoon of sugar
- Quarter teaspoon of salt

Ensure that you mix the quantities carefully; too much salt can have an adverse effect.

Mix together and drink regularly.

If diarrhea persists for longer than 48 hours seek medical attention as it’s possible it’s something more serious.

## **Bees, Wasps(Masamganaua), Ants and Scorpion(Chipilili) Stings**

Most stings are not harmful, but they can be extremely sore.

To help reduce the pain of a sting:

- Rub sting with a piece of cut onion
- Make paste with water and bicarbonate of soda and water and apply to sting.

Some people are allergic to bees, wasps etc, and they will have a very bad reaction to the sting and will need medical attention or will need to take an antihistamine pill.

- First sign of a bad reaction is the skin around the sting to become itchy.

- Then the area around the sting will begin to swell.
- Lastly the person will start struggling to breath – at this point they need to take pills or see doctor immediately as people can die from this.
- Please Note: This is not very common and it's not something to worry about but just to be aware of.

### **Boils (Vitufia) and Other Infected Sores**

Describe what a boil is.

These usually go away themselves after some days but to encourage the boil to open and get rid of the puss you can wash the boil with hot water then apply a paste made up with 1 teaspoon of sugar and soap to the boil. Cover with clean material or cabbage. Repeat every 12 hours till puss is out the boil.

### **Home Cough Mixture**

Cough – Mancolo

Cold – Chifuwa

To help sooth the cough and get rid of the cold, drink:

- Hot clean (boiled) water
- 1 teaspoon of lemon juice
- 1 teaspoon of honey
- Piece of ginger (if you have it)

### **Malaria**

- Malaria is caused by a bite from an infected, night biting mosquito.
- The malaria parasite goes into the liver, multiplies then enters back into the bloodstream and then attacks the red blood cells, eventually killing you.
- Not all mosquito's carry the malaria parasite.
- If you have malaria and you are bitten by another mosquito then that mosquito will now carry the malaria parasite. So the more people who have malaria, the more mosquito's will have malaria and so on.

### **Symptoms**

- Symptoms take at least one week to show – it can take up to one year to start to show.
- First symptom will be a fever, this starts with cold shivering whilst the body temperature starts to rise. Then there will be hot flushes, followed by sweats and then the body temp should start to fall again. (At this point I showed them how to take body temperature by feeling someone's forehead and talked about normal body temp of 37 degrees.)

Other symptoms that may follow include:

- Headache, aching muscles and joints
- Nausea, vomiting and diarrhea (esp. in children)
- Cough
- Stomach pain
- Jaundice (yellow skin and eyes)

The problem with self diagnosing Malaria is that the symptoms are similar to flu and can be confused, however Malaria can kill you very quickly so worth being cautious and getting the person to doctor if suspected.

- Malaria can be treated, if treated then it should not re-occur.
- Malaria can become very serious within 24 hours (and less time for children)
- If a fever has not subsided within 8 hours and you have other symptoms then seek urgent medical help.

### **Prevention is better than cure:**

- Only way to prevent getting malaria is to avoid being bitten by mosquitos.
- If you only have 1 bite in a year then it's not likely to have given you malaria but if you have 50 then you increase your chance of contracting malaria by 50.
- You can buy mosquito nets from the hospital for K100 or K50 if you are pregnant or have young children.

## **Week Three – HIV and Sexually Transmitted Diseases**

### **HIV and AIDS**

- HIV is a virus that attacks the immune system – the immune system fights off disease.
- There is no cure
- The HIV virus eventually turns into AIDS. This virus doesn't actually kill you but you have no immune system to fight against other diseases and eventually you will die prematurely.

### **How do you get HIV?**

At this point I asked the class what they thought. There was mixed response but most people knew it was via unprotected sex.

- Via sexual fluids, i.e. having unprotected sex with someone who has HIV or AIDS.
  - It's more likely that an infected male will pass on the infection to a female than an infected female to a male, but obviously it does happen.
- Via contaminated blood, i.e. sharing needles, razor blades, body piercing, tattoos, transfusions
- Being born with HIV if your mother has HIV or AIDS. Or if you are not born with it the virus can be passed on via breastfeeding.

### **HIV Facts**

- 30 million people have AIDS worldwide; 21 million of them live in sub-Saharan Africa.
- 90% of the children who have AIDS live in sub-Saharan Africa.
- You can carry the HIV virus for many years without even knowing therefore it's very easy to pass this on.
- You cannot tell by looking at someone if they have HIV or AIDS.
- HIV virus cannot be passed on via:
  - Saliva (e.g. kissing)
  - Cuddling
  - Sharing same bowl, cup, fork
  - Using the same toilet seat
  - Insects (e.g. its not like the malaria parasite)

### **Symptoms and Signs of HIV/AIDS**

- There is no immediate sign that you are infected.
- Some people may get a fever, aches, pains, skin rashes, swollen glands a few weeks after the infection.
- Everyone is different, it may show after a few weeks of being infected, or it may take many years.
- Only a blood test will tell for sure if you have it and its only accurate 3 months after the infection.

### **How do you avoid getting the HIV virus?**

- Do not have unprotected sex with a new partner, use a condom till you are sure they are not HIV +.
- Don't share needles/razor blades etc.
- Ensure that the doctor uses new needles when you are being treated and don't be afraid to ask.
- Protect yourself if you are helping someone with a bleeding wound.

- Not all children will have HIV if they are born to an HIV mother but there is a high chance it will so avoid having children if you know you have HIV/AIDS or please do consider the risk that your child could be born with HIV.

HIV is a very serious disease which kills many many young people. If you do get HIV there are drugs that you can take to help but again prevention of getting this is the way forward.

### **Sexually Transmitted Diseases (STD's)**

- There are many STD's you can contract, e.g. Syphilis, Gonorrhoea, Chlamydia, Chancroid. The symptoms for them are all very similar so its not easy to self diagnose, you will need to seek medical attention to get them treated.
- All STD's can be treated if caught early enough however they can cause serious illnesses, such as infertility, liver disease and cancers if they are not treated.

#### **Symptoms include:**

- Abnormal discharge (more than usual, funny colour or very smelly)
- Pain during sexually intercourse or urination
- Blisters, lumps, rashes or itching around the vaginal or anus area

You may get the above symptoms without having an STD – it may be due to having cystitis or thrush.

### **Cystitis**

- This is an infection in the bladder.
- This is a very very common infection for woman to get, whether they are sexually active or not.
- It is caused by a bacterium that lives in the bowl entering the bladder. The bladder holds waste water before you urinate and the bowl holds food waste before pooing – there is a tube that connects the two so bacteria can go from one to the other. It's more common in woman than in men.

#### **Symptoms**

- Constant need to go to pee.
- Pain when you do urinate and you are only able to pass a very small amount.
- Abdominal pain
- In very bad cases you may pass blood.

#### **To get rid of it:**

- Drink lots of water to flush it out your system.
- Mix one teaspoon of bicarbonate of soda with one cup of water – drink regularly
- Symptoms should pass within about 48 hours, if they don't then it's possible that it's not cystitis and you will need to seek medical treatment.

Untreated serious cases of cystitis can cause severe illnesses.

This is very common for woman to get; if you are sexually active you can minimize the chance of getting it by:

- Cleaning yourself after sex
- Taking a pee after sex – the urine kills the germs
- Drink water after sex and don't get dehydrated.

### **Thrush**

- This is a bacterial infection in the vagina.

- Also very common in woman.

### **Symptoms**

- Itchy vaginal area
- Abnormal discharge

### **To get rid of it:**

- Wear cotton underwear
- Wear loose fitting clothes
- Wash several times per day, especially if sweated a lot
- Some soaps will irritate the thrush and make it worse so just use water
- Sit in or wash in a weak solution made up with water and vinegar or bicarbonate of soda.

Symptoms should last for 3-4 days – if it continues for longer then it might not be thrush, you will have to seek medical attention.

## **Week Four – Other Topics as requested by the ladies**

### **Asthma**

- This is the term used for people with breathing difficulties.
- The breathing difficulties will not be constant but will come on from time to time – thus causing an asthma attack – this can be slight or very severe.
- The air passage becomes very swollen letting less air into the body – draw picture of air tube, normal and swollen.
- You are usually born with asthma (some people may develop it later on in life)
- Some children do grow out of asthma by the age of 21 but apart from that there is no cure.
- It is hereditary, meaning it runs in families.
- You can lead a normal life with this disease as long as you know that you have it and how to control it.

### **External Triggers can bring on an asthma attack:**

- Dust
- Animal hair
- Smoke (from open fires)
- Pollen
- Being ill, suffering from the cold/flu

Sometimes an asthma attack can just occur for no apparent reason.

### **Symptoms**

- Breathlessness
- Wheezing
- Coughing (and coughing up thick green flem)
- Tightness in the chest

Most attacks will pass naturally although some severe attacks can kill so if it's very serious you must seek urgent medical attention.

### **To help someone having an asthma attack:**

- Keep them calm – the more they panic the less they will be able to breathe.

- Get them to sit down – if it's at night don't let them lie down to sleep – lying down will not help the breathing.
- Hold their hand, look them in the eye and ensure you have their attention – count their breathing with them, in for two, out for two, in for two, out for two – this should help to calm them down and ensure that they are getting enough air for the attack to pass.

## **Blood Pressure**

- BP is the measure of blood flow throughout the body
- It's normal for BP to go up and down during the day depending on what you are doing, if you are exercising it will go up, smoking will also make it go up and resting and sleeping will make it go down.
- Pregnant ladies will have a higher BP than normal but this is ok provided it returns to normal after the birth
- BP naturally increases as you get older.

## **High Blood Pressure**

- Someone who has high blood pressure always has a higher than normal reading of pressure.
- This can be dangerous for your health and can help cause heart attacks and strokes.
- Its more common to have high blood pressure if you are:
  - Male
  - Older
  - Overweight
  - Smoke
  - Eat too much salt
  - Do not do any exercise
- This is a very serious illness in the UK but you can take action to reduce your High BP:
  - Loose weight (if you are overweight)
  - Eat less salt
  - Take exercise (even walking more is good)
  - Quit smoking (if you are a smoker)

There is no sign or symptom that you have high BP, only a test from the doctor will tell. Some people who are thin, take plenty exercise can have high BP and this is unlucky – talk to the doctor about ways they can bring it down successfully.

## **Family Planning**

Family planning means deciding on how many and when you will have your children. Between yourself and your husband you need to agree on this. If you want to go to school then you can wait till you are older to have children, or if you have them early you can decide after 3 it's enough. There are plenty of contraceptive methods available for free in this country.

### **Condoms**

- Prevents pregnancy
- Also prevents HIV and STD's
- If they are used correctly they are very effective.
- They are about 99% proof.

### **Daily Pill**

- Prevents pregnancy
- Doesn't prevent HIV or STD's
- This pill needs to be taken daily with a break of 7 days for your period.

- It's about 99.5% proof – if you are sick or have diarrhea then it might not work – use condoms for 7 days after any sickness.
- There is also the mini pill which you have to take everyday.

### **Injection**

- Prevents pregnancy.
- Doesn't prevent HIV and STD's.
- You need to go to the doctor every 12 weeks to get this injection.
- This also stops you having a monthly period.
- The downside to this is that some woman experience daily bleeding after the first injection, this should clear up after the second one.
- The other downside is that if you want to have children you need to think in advance and give your body 1-2 years to get back to "normal" – some woman might get pregnant straight after coming off the injection so be sure to use other contraception if you don't want to get pregnant.

### **Implant**

- Small chip that the doctor inserts into the top of your arm that gives off a hormone that prevents pregnancy.
- Lasts for 2 years.
- Doesn't prevent HIV and STD's.

### **Diaphragm and Coils**

- Very old fashioned method, the coil is inserted high up into the vagina.
- Prevents pregnancy
- Also prevents HIV and STD's
- Need to ask doctor for more advice on this one.

All women are different so best to talk to your doctor about which one suits you best at the time of your life you are at.

### **Scrambled Egg with Garlic, Onion and Tomatoes**

Ingredients (for 2 people)

1 onion cut into small pieces	Oil
4 Eggs	Garlic (optional)
2 tomatoes (chopped into small pieces)	

1. Fry the onion in a little oil till its soft and a little brown
2. Add garlic (if you have it)
3. Beat the eggs
4. Add the beaten eggs to the onions
5. Keep stirring the eggs and don't let them stick to the bottom.
6. Add salt and pepper.
7. When egg is cooked add the tomatoes and heat through.

### **Sweet Potato and Vegetable Patties**

Ingredients (for 2 people)

1 onion cut into small pieces	Oil
3 sweet potatoes	Groundnuts
2 tomatoes (chopped into small pieces)	1 bunch of green leaves

1. Peel and chop the sweet potato into small pieces
2. Boil the sweet potato in salted water till cooked through
3. Mash the sweet potato with a fork and leave aside to cool.
4. While the potato is cooling fry the onion in a little oil and cook till soft and a little brown.
5. Add the green leaves, cook through.
6. Add tomatoes and groundnuts and heat through.
7. Mix the cooked greens with the mashed sweet potato.
8. Roll into small balls, pat down so it is flat, then fry for about 2 minutes on each side, or until golden brown.

You can use any cooked vegetable mixed into the sweet potatoes.

Eat with rice, other vegetable or just on its own.

### **Fried Nsima Balls**

Ingredients (for 2 people)

Maize Flour (Ufa)	Oil
Water	

1. Make up Nsima with the flour and water.
2. Let it cool a little then roll the nsmia into balls and fry in hot oil till golden brown.
3. Sprinkle a little salt over them and eat like chips or with vegetables.

### **Bean Salad**

Ingredients for 2 people:

1 onion cut into small pieces	Oil	Salt
Any dried beans, soaked overnight and cooked	Any other vegetables such as cabbage, peppers, carrots	
2 tomatoes (chopped into small pieces)	The juice from 1 Lemon	

1. Add cooked beans to large bowl.
2. Chop up all other vegetables you have along with the tomato and onion and mix though with the beans.
3. Add a little oil, lemon juice and salt to the bean and vegetable mix – eat cold.

### **Banana Fritters (Ziutmbuwa)**

Ingredients for 2 people:

3 ripe bananas	Pinch of salt	Oil
1 teaspoon of sugar	Half cup of Ufa	

1. Mash the bananas
2. Add the salt and sugar to the bananas and mix well.
3. Stir in the ufa
4. Fry spoonfuls of the banana mix in the hot oil till golden brown.