

Strong body, strong mind, strong future

Promoting healthy habits in schools and communities in the Solomon Islands



Taiwan Health Centre
R.O.C Taiwan



LIVE & LEARN
Environmental Education

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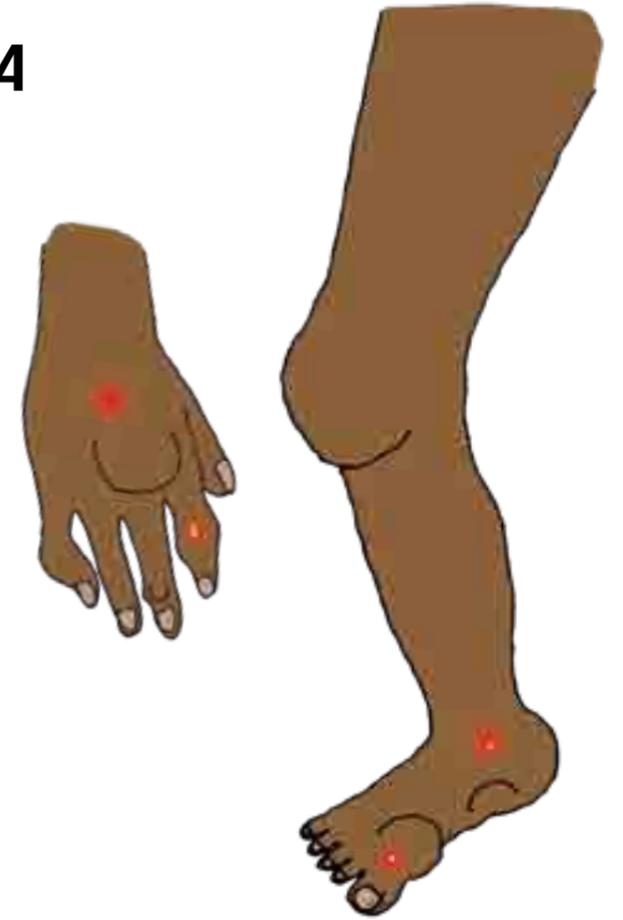
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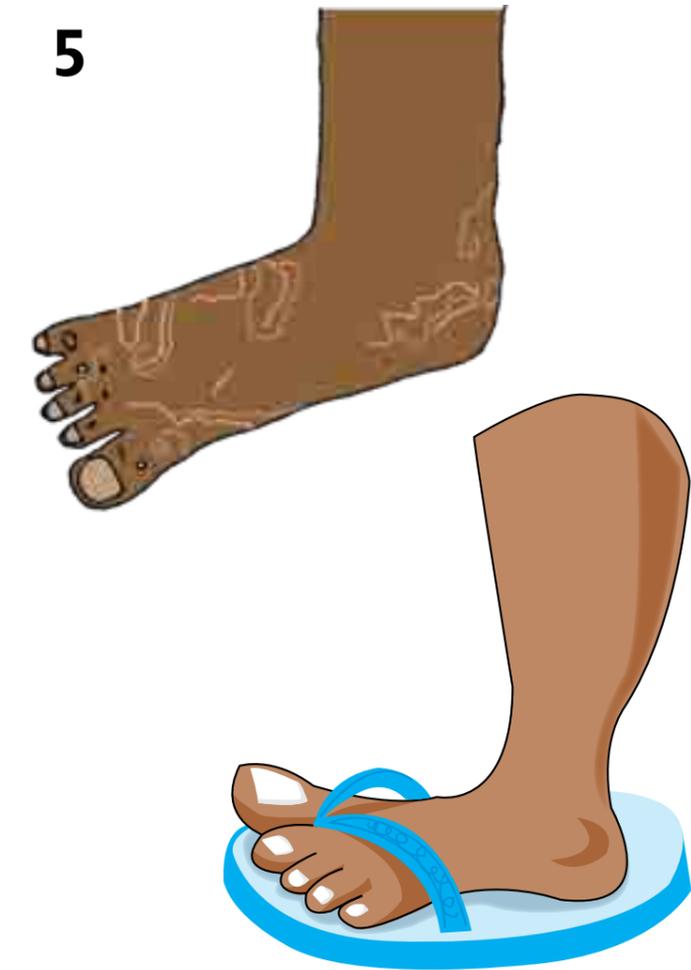
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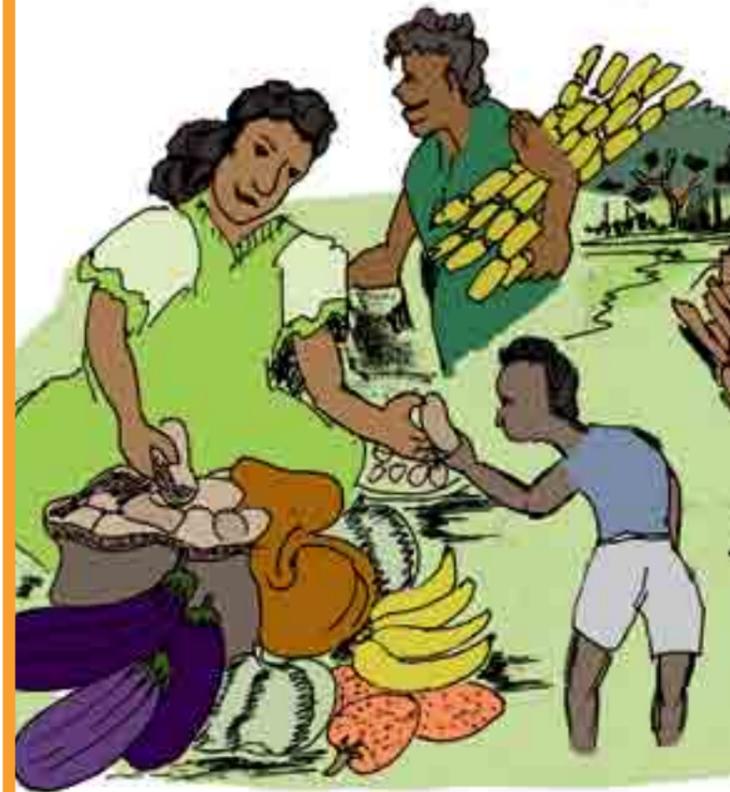
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Introduction

About this flipchart

This flipchart aims to strengthen health levels in schools and communities in the Solomon Islands. It aims to highlight the risk factors of 'lifestyle' diseases, and the health implications of these conditions including diabetes, hypertension and gout. This resource also aims to encourage schools and communities to adopt healthy habits with a particular focus on nutrition, increased exercise and safe hygiene practices. This flipchart can be used by community leaders and facilitators, schools, and government organisations to raise awareness of the importance of healthy lifestyles. This flipchart will build on previous healthy promotion activities undertaken in the Solomon Islands.

The flipchart consists of eight topics:

Topic #	Topic title	Description
Topic 1	Our lifestyle and diets are changing	Less physical exercise and a changing diet are contributing to the growth of 'lifestyle' diseases in the Solomon Islands.
Topic 2	Lifestyle Disease – Diabetes	Diabetes is a condition where the body can no longer control the level of sugar in the blood stream.
Topic 3	Lifestyle Disease – Hypertension	Hypertension is a condition where the blood pressure is too high.
Topic 4	Lifestyle Disease – Gout	Gout is a condition where there is too much uric acid in the blood stream.
Topic 5	Parasites – hookworm	Hookworms are a parasite that live in the small intestine of humans.
Topic 6	Prevention – Healthy habits	A 'healthy lifestyle' is based on what we put into our mouths and how much we move our bodies. Developing healthy habits depends on personal, community and government actions.
Topic 7	Prevention – Growing food	Making food gardens is easy, cheaper and tastier!
Topic 8	Prevention – Food safety	Unhygienic practices (like not washing our hands with soap) can contaminate the food we eat causing conditions like diarrhoea.

How to use this flipchart

There are 19 pages in this flipchart. You can work through the pages starting from Topic 1 to 8, or just present the Topics relevant for your participants. We estimate that you will need approximately 30 minutes to work through each page.

On the front of each page are illustrations. Position the flipchart so that the participants can see the illustrations clearly. The back of each page provides information on how to facilitate the group discussion.

Each page contains four sections:

- Learning outcomes:** these outcomes indicate the key points which can help you plan your teaching sessions.
- Background for facilitator:** this information is for the benefit of the facilitator and should not be read out loud. This information provides the context for each discussion.
- Discussion points:** use these points to generate a discussion with the group based on the illustrations.
- Activity ideas:** use these ideas to undertake an activity with the group. This will help to break up the talking and reinforce the key points and concepts. These activities can be used by schools and communities. Facilitators will have to tailor the activities to suit the various age groups of participants.

Activity list

Topic/Activity	Description
Topic 1 Activity 1: Food diary	Participants list the food they eat in one day and classify whether food is grown or store-bought.
Topic 2 Activity 2: Sugar – sweet...and sickening	Participants replace their daily sugary foods (identified in Activity 1) with other food.
Topic 4 Activity 3: Let's move it, move it!	Participants create and perform a song with actions that encourages people in their community or school to move more each day.
Topic 5 Activity 4: A hookworm's journey	Participants understand the journey of a hookworm from penetration into a person's foot, into their small intestine and transmission from faeces.
Topic 6 Activity 5: Eating plan Activity 6: 'Mipela strong!' plan	Participants organise the daily food groups into the three areas that make up a 'healthy' Pacific diet and discuss their findings. Participants come up with a plan for their community, highlighting the barriers and incentives to encouraging healthy actions.
Topic 7 Activity 7: Money grows on leaves! Activity 8: Growing a garden	Participants set up a kitchen garden. This will need some preparation prior to the workshop. Participants identify the savings to be made from growing food.
Topic 8 Activity 9: Handwashing high-five!	Participants undertake a handwashing demonstration.

Introductory points

- Welcome the participants and thank them for coming.
- Ensure that the flipchart is positioned so all participants can see the illustrations and hear you clearly. It might be easier to work in smaller groups of 15–20 people to ensure that all participants can be involved.
- Introduce yourself and others in your team. Advise the group of the objectives of the workshop and the times you will take breaks and end the session.
- Tell the participants about the flipchart approach – ie. there is a large picture on one side and discussion points and information on the back page.
- Explain that there will be discussion questions and activities for each page. Explain how you will deal with any questions.



LIVE&LEARN
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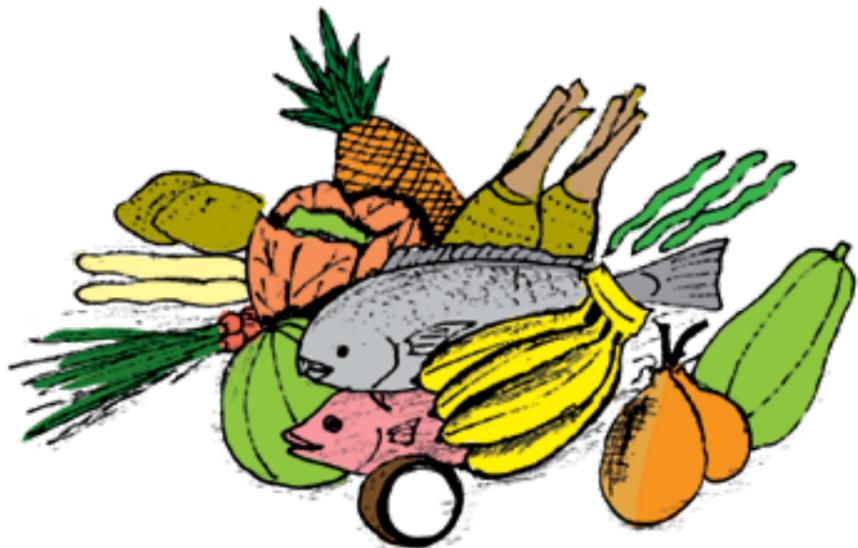
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Writers: Jacob Zikuli and Tamara Logan (Live & Learn Environmental Education)

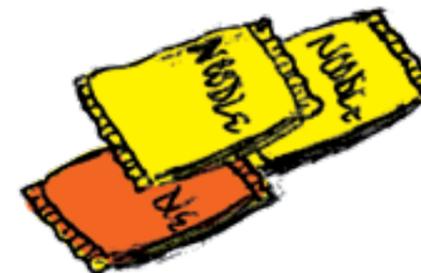
Illustrations: Kotinah Joyce, Frank Sauni and Guy Ivison

Resource production: Karen Young (Live & Learn Environmental Education)

Diet and lifestyle



You are what you eat!



Topic 1: Our changing diet and lifestyle

Learning outcomes:

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

- Discuss how Solomon Islands' diets and lifestyle have changed
- Share information on traditional farming, fishing and gardening practices
- Understand the cause and effect of obesity
- Understand the importance of a healthy, balanced diet and a more active lifestyle

Background information for the facilitator:

Solomons' diets are changing

Traditionally, Solomon Islanders (like all Pacific islanders) gathered their food from the sea and land. Fish, meat and fruit and vegetables were the staples (key foods) in the Solomons' diet. Food gardens were abundant with a rich variety of fruit and vegetables that were nutritious and tasty. Solomon Islanders were strong from fishing and farming, and healthy from growing, gathering, and eating the food from the land and sea.

The change in lifestyle has introduced many more foods into the Solomons' diet: including rice, bread, tinned fish, biscuits, ring cakes and instant noodles. Many of these foods are more convenient (ie. easier to prepare and serve), however, these foods do not contain a high level of nutrition. They are often high in sugar, fat and salt, and do not provide the adequate vitamins and minerals to keep our bodies strong. We are also moving less – and eating more, resulting in serious health complications, or 'lifestyle' diseases, such as diabetes.

Solomon Islands: a growing nation

Obesity occurs when we are carrying too much fat, which may result in health issues such as diabetes, gout and high blood pressure (hypertension). Whilst traditionally, Solomon Islanders experienced a healthy lifestyle, the number of overweight and obese people is growing rapidly. 67.4% of the population is overweight and more than a third of Solomon Islanders are obese. In the past, larger people were often viewed as 'stronger' people. However, it is important to now teach our children about the importance of a healthy and active lifestyle to help lower their risks of long term health conditions.

'Lifestyle' diseases

We are becoming bigger, risking the chance of becoming obese, which can lead to a range of what are called 'non-communicable' or 'lifestyle' diseases: diseases that are a direct cause of how we live our lives, and are avoidable by leading healthy lifestyles, such as through diet and exercise.

We need to move it, move it!

Fishing, farming, growing fruit and vegetables to eat, building houses: all these traditional activities meant that Solomon Islanders were moving a lot more. These days, people aren't moving as much as they used to. Combined with the increase in salty, sugary, fatty foods we're consuming, our bodies are changing.

Discussion questions:

1. Look at the pictures. What can you see?
2. What do you think we mean by 'you are what you eat'?
3. What are some of the traditional ways we used to gather our food? Where do you get your food from now? What has changed in the past 50 years?
4. Traditionally Pacific islanders were more active and had a different diet to today. What do you think are some of the effects of this change on our health?
5. What types of food did your grandparents eat 50 years ago? Has anything changed?
6. What types of food do you eat most often?
7. How often do you eat?
8. How often do you exercise or perform physical labour?
9. What are the cultural perceptions or views about being a bigger person?
10. Do you know any people who experience diabetes/hypertension/gout or other 'lifestyle' conditions?



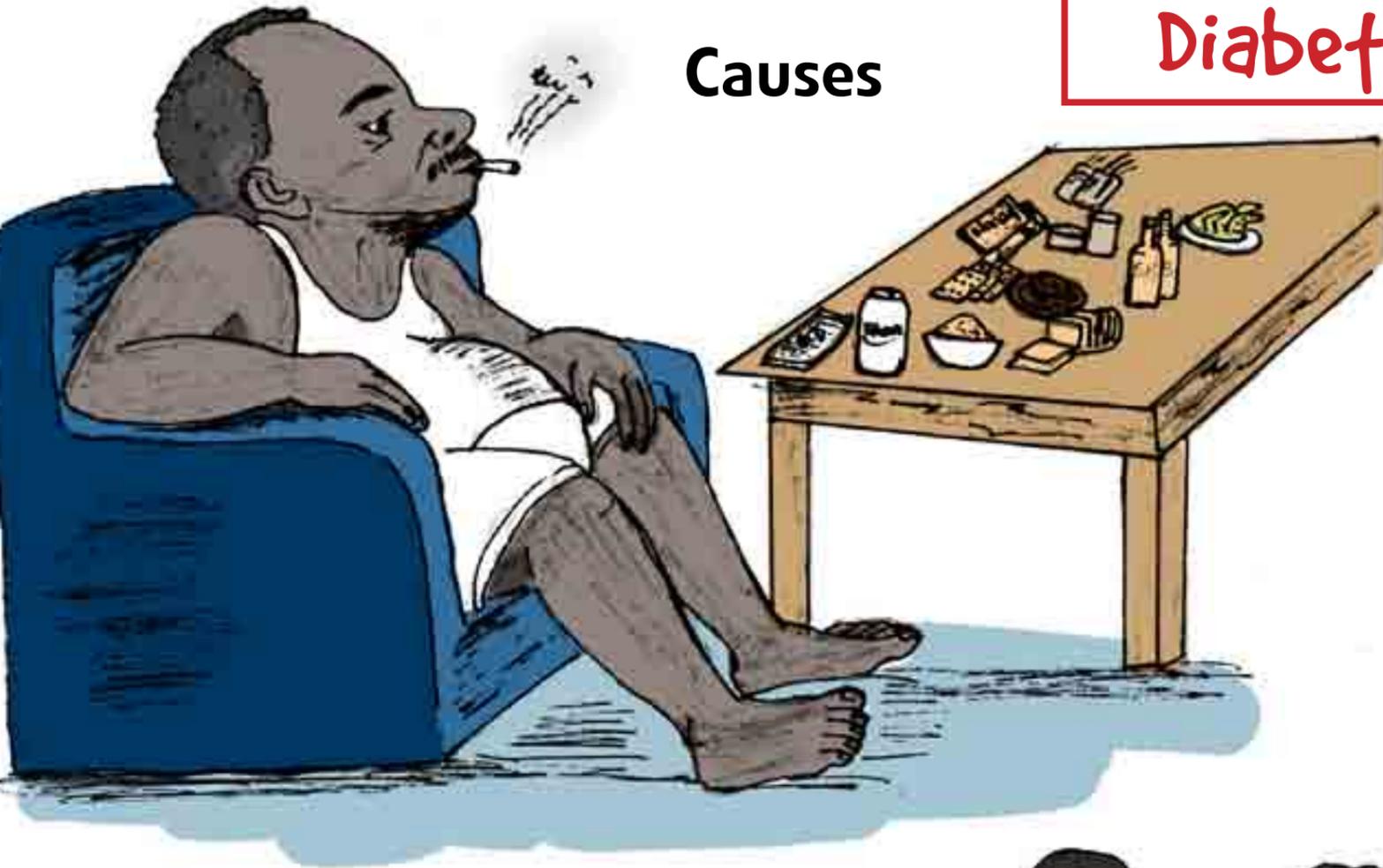
Follow-up activity:

Activity 1: Food diary

Groups of participants (of up to five in each group) list the foods they eat in a day. Ask participants to indicate the source of these foods (eg: store bought, grown in gardens etc).

Diabetes

Causes



Effects



Prevention



Treatment /management



Topic 2: Diabetes – high blood sugar level

Learning outcomes:

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

- Understand what causes diabetes
- Identify the long-term effects of diabetes
- Understand how to prevent and manage diabetes

Background information for the facilitator:

What is diabetes?

Diabetes is a condition where the body can no longer control the level of sugar in the blood stream.

We need glucose (sugar) for energy. Glucose is like fuel for our bodies (like petrol is used in cars). When we consume sugar, the blood transports this sugar to the muscles. Our pancreas produces a hormone called insulin that moves sugar from our blood into body cells. When our pancreas does not produce enough insulin, or the insulin does not work properly, this can lead to high sugar blood levels. Over time, there are some serious health impacts that can be caused by having too much sugar in our blood.

Diabetes is the most common and rapidly increasing 'lifestyle' disease in the world. There are three different types of diabetes. Type 2 diabetes (the most common in the Pacific) is a direct result of our daily lifestyle, and closely connected to our diet and exercise habits.

Diabetes is now one of the top five causes of death in more than half of the Pacific Island countries and territories. 14% of Solomon Islanders have diabetes. Diabetes is prevalent in nearly all urban centres as a result of people's eating habits.

What can cause diabetes?

- Lack of exercise: Changing Pacific lifestyles means that we are moving away from physical labour and towards more sedentary (still) lifestyles. This is resulting in an increase in obesity.
- Diet: Our changing diets are due to the different types of food we eat, including high-fat, high-salt and high-sugar foods.
- Being overweight.
- Increasing age.
- Family history may also increase your risk of contracting diabetes.

Signs and symptoms

- Passing a lot of urine
- Weight loss
- Mood swings
- Feeling very thirsty
- Feeling weak and tired
- Headaches
- Blurry vision
- Leg cramps
- Feeling dizzy
- Always hungry
- Sores and cuts are slow to heal

However, some people who have type 2 diabetes show no symptoms at all in the early stages.

What are the effects of diabetes?

Early detection and good management can reduce the long-term effects of diabetes. However, if left untreated, increased blood sugar levels can result in the following health conditions:

- **Damaged eyesight**/permanent blindness
- **Stroke**
- **High blood pressure/heart problems**
- **Kidney failure**
- Pregnancy: a pregnant woman with diabetes has an increased risk of developing **problems during the pregnancy**. The baby is also at increased risk.
- **Wound healing** is slower.
- **Amputations**: People with diabetes may experience nerve damage and poor circulation, resulting in problems like ulcers or infections of their feet.

How can you prevent diabetes?

The way you live your life will deter the onset of Type 2 diabetes.

Maintaining a healthy weight, being physically active and following a healthy eating plan can reduce a person's risk of developing Type 2 diabetes by up to 58%. Diabetes can be prevented through regular exercise, healthy balanced diet, not smoking/drinking, and maintaining healthy weight.

How can you treat and manage diabetes?

Diabetes cannot be cured – but it can be managed through a combination of diet, healthy lifestyle and medication (if prescribed).

- Diet: eat a balanced diet, eat regularly, reduce fat, sugar and salt intake and increase fruit and vegetable intake.
- Exercise: stay physically active – exercise regularly
- Lose weight: losing just 10% of body weight can help control diabetes
- Regular health check-ups
- Take medication regularly as directed by Doctor
- Avoid drugs, smoking and betelnut
- Drink alcohol and kava in moderation
- Drink plenty of clean, safe water

All Pacific Island countries (including the Solomon Islands) are struggling to provide adequate healthcare services required to support patients with diabetes. Hence, it is critically important to ensure a healthy lifestyle, not only for yourself, but your family, community and country.

Discussion questions:

1. Look at the pictures. Discuss the causes, effects, prevention and treatment for diabetes.
2. Do you know anybody with diabetes? How does this condition affect their lifestyle, work?
3. The rate of diabetes in the Solomon Islands has drastically increased in the past ten years? Why is this?
4. Diabetes is incurable. What are some of the ways we can reduce our risk of contracting diabetes?
5. What are some ways that we can manage diabetes?
6. What are some traditional foods we can grow to improve our daily diet?

Follow-up activity:

Activity 2: Sugar – sweet...and sickening.

Diabetes is a result of a series of risk factors, such as eating too many sugary foods. Following on from Activity 1, in the larger group, make one list of all the foods consumed that contain high levels of sugar. Make a list of other foods that could replace the sugary foods (eg: honey instead of sugar, fruit instead of biscuits). Make a personal challenge to reduce the level of sugar in your diet by half!

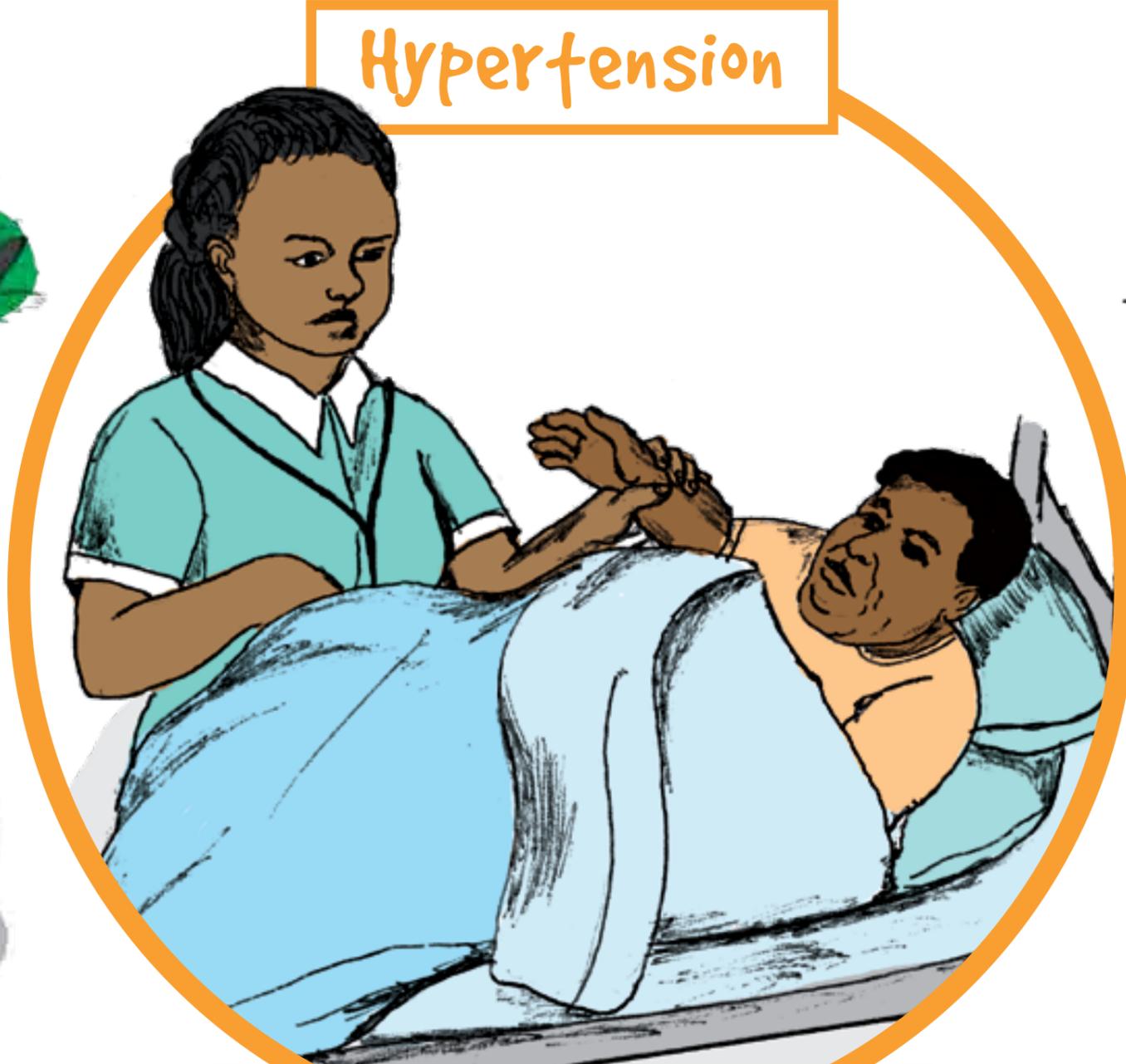
Diabetes facts

- Diabetes is a 'lifestyle' disease: meaning it's caused by how we live our lives (risk factors include lack of exercise, diet, being overweight).
- Type 2 Diabetes has no cure and is a progressive disease – once you are diagnosed, it gets worse over time.
- Diabetes can be prevented through regular exercise, healthy balanced diet, not smoking/drinking, and maintaining our weight.
- If not treated, diabetes can lead to a range of long-term health problems and even death. Diabetes is one of the top five causes of death in more than half of the Pacific Island countries and territories.

Causes



Hypertension



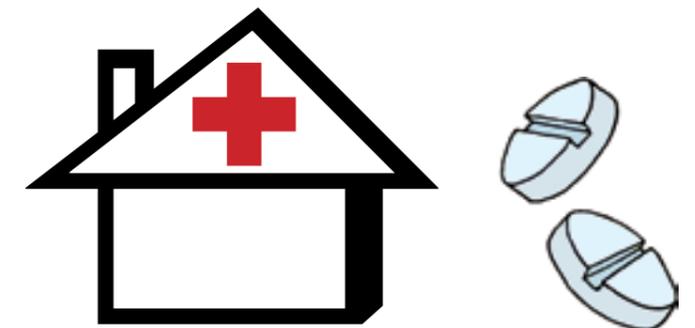
Prevention



Effects

- Heart attack or heart failure
- Damage to blood vessels
- Stroke
- Kidney disease
- Eye disease

Treatment



Topic 3: Hypertension – high blood pressure

Learning outcomes:

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

- Recognise the symptoms, causes and complications of hypertension
- Understand how to avoid and treat hypertension

Background information for the facilitator:

What is hypertension?

Hypertension means that a person's blood pressure is too high. Blood pressure is the pressure of the blood against the walls of the blood vessels, much like the pressure of water against the inside of a hose. Blood pressure tells us how hard the heart is working as it pumps the blood around the body. When blood vessels are healthy, blood flows through them easily. When vessels become hard or blocked, the blood cannot flow as easily. The higher the blood pressure, the harder the heart is working. The prevalence of hypertension increases with age.

What causes hypertension?

There are usually not warning signs or symptoms of hypertension. People usually do not know they have this hypertension until someone checks their blood pressure. However, the following things can cause hypertension:

- Obesity
- Lack of physical activity (exercise)
- High dietary salt intake
- Excessive alcohol consumption
- Heredity
- Excessive stress

What are the effects of hypertension?

Often, people with hypertension feel happy and well but the long term effects of hypertension include:

- Heart attack/heart failure
- Stroke
- Gangrene and amputation
- Eye disease
- Kidney disease, end stage renal failure requiring dialysis
- Haemorrhage from damaged blood vessels

Opportunities to test for hypertension

- As part of regular health checks
- As part of a regular review of people with a chronic disease such as diabetes and kidney disease
- During routine ante natal care
- As part of assessment for an acute illness or injury, monitoring of medication in preparation for anaesthetic or other procedures

How can you prevent hypertension?

- Eat sensibly and maintain a healthy weight
- Stay physically active – exercise regularly
- Avoid alcohol/smoking
- Health education awareness on hypertension
- Avoid salty food
- Include potassium in your diet through eating unprocessed fish, fruit and vegetables
- Find ways to reduce stress

How can you treat hypertension?

Hypertension can be treated through a combination of diet, healthy lifestyle and medication (prescribed by a health professional)

Discussion questions:

1. Look at the pictures. Discuss the causes, effects, prevention and treatment for hypertension.
2. Do you know of anybody who experiences hypertension?
3. How are they affected?
4. What are some of the ways of avoiding hypertension?
5. What are some ways of treating hypertension?

Causes



GOUT

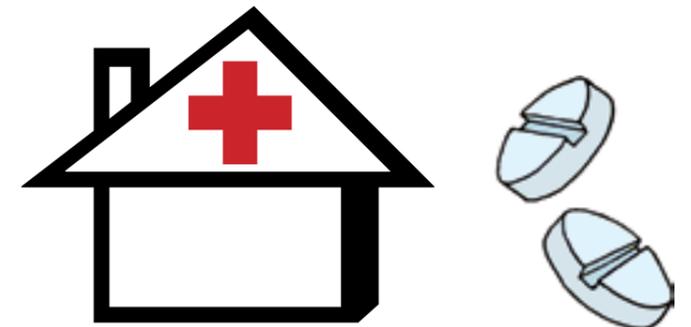
Effects



Prevention



Treatment



Topic 4: Gout - High uric acid in the blood

Learning outcomes:

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

- Recognise the symptoms, causes and complications of gout
- Understand how to avoid and treat gout

Background for facilitators:

What is gout?

Gout is a form of arthritis that causes pain, swelling and stiffness in joints. Gout is caused by too much uric acid in the blood stream. Uric acid is a waste product found in urine. Generally, the uric acid is dissolved in the blood, and is also flushed out through the kidneys. However, when there is too much uric acid in the blood, it can crystallize (harden and join together) and build up in joints, tendons, and surrounding tissues. Gout is an inherited disorder that is particularly prevalent in some Pacific communities.

What causes gout?

Some major causes of gout are:

- Family history: it is estimated that up to 18% of people with gout have a family history associated with gout.
- Over consumption of food high in purines which break-down into uric acid. Some foods high in purines are: alcohol, yeast, meat (especially organs such as liver, beef kidneys, brains) and fructose (found in most soft drinks).
- Excessive alcohol drinking or drinking over a long period of time
- Obesity
- High blood pressure
- Breaking bones or a hard knock to the knee, leg or elbow

Signs and symptoms of gout

- Razor sharp crystals in body joints such as the toes, ankles, feet, heels, elbow, fingers, ears, spine and hands
- Inflammation, heat and pain
- Skin that is shiny, red and painful

What are the effects of gout?

If left untreated, gout can result in:

- Kidney stones and damage
- Joint damage
- Heart disease
- Spinal damage

How can you prevent and treat gout?

Generally gout and is treatable. The following things can help treat gout:

- Weight loss and major diet changes: this is the best chance of reducing gout pain or eliminating gout.
- Drinking lots of water: drink at least 2 litres of water a day.
- Eating a diet rich in carbohydrates in the form of fruits and vegetables, combined with whole grain breads and pasta.
- Regular exercise.



Follow-up activity:

Activity 3: Let's move it, move it!

Physical exercise is a key way to prevent and manage health conditions such as diabetes, gout and hypertension. Now would be a good time to encourage some moving around! If inside, encourage some stretching. Divide the participants into groups of five. Encourage each group to come up with a song that encourages people in their village/community to move more each day. Ask each group to perform to the entire group. Ask participants to vote on the most interesting/humorous song.



Discussion questions:

1. Look at the pictures. Discuss the causes, effects, prevention and treatment of gout.
2. Can you see anything in common with the pictures on the previous pages?
3. Do you know anybody who experiences gout? Are they a friend or family member?
4. How are they affected?
5. Many people who experience gout, have family members who also experience this condition. Discuss why these people need to pay close attention to their health.
6. What are some of the ways they can avoid getting gout?

Hookworm

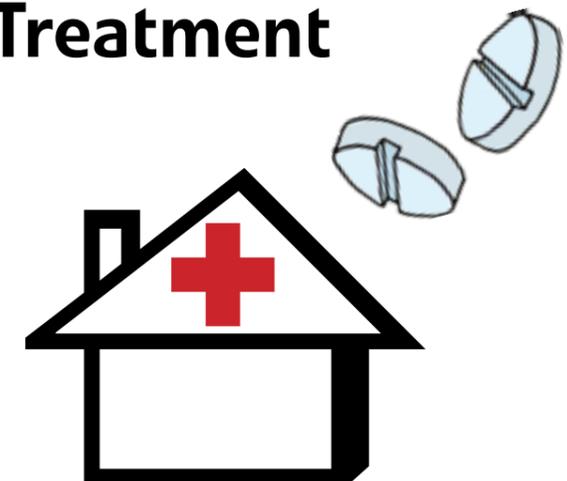
Effects



Prevention



Treatment



Causes



Topic 5: Parasites - hookworm

Learning outcomes:

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

- Understand the dangers of hookworm and ways to catch hookworm
- Recognise the symptoms of hookworm
- Demonstrate knowledge of the importance of reducing open defecation to reduce the incidence of hookworm

Hookworm: what is hookworm?

Hookworms are parasites that live in the small intestine of humans, causing infections, and resulting in symptoms like diarrhoea.

How is hookworm spread?

- Hookworm eggs are passed in the faeces of an infected person. If an infected person defecates outside (near bushes, in a garden, or field) eggs are deposited in the soil. The larvae mature into a form that can penetrate the skin of humans and live in a person's intestines.
- Hookworm infection is transmitted primarily by walking barefoot on contaminated soil.
- Hookworm can also spread when faeces (or night soil) from an infected person is used as fertilizer.
- A kind of hookworm can also be transmitted through the ingestion of larvae. This can occur when hands are not washed properly.

Who is at risk of infection?

- People who walk barefoot or in other ways allow their skin to have direct contact with contaminated soil.
- Children who play in contaminated soil.
- Hookworm infections can create serious health problems for newborns, children, pregnant women, and malnourished people.

What are the signs and effects of hookworm?

A person with a hookworm infection may experience:

- Itching or rash where contaminated soil has touched the skin
- Slow physical and cognitive growth of children
- Abdominal pain
- Diarrhea
- Loss of appetite
- Weight loss
- Fatigue
- Anemia

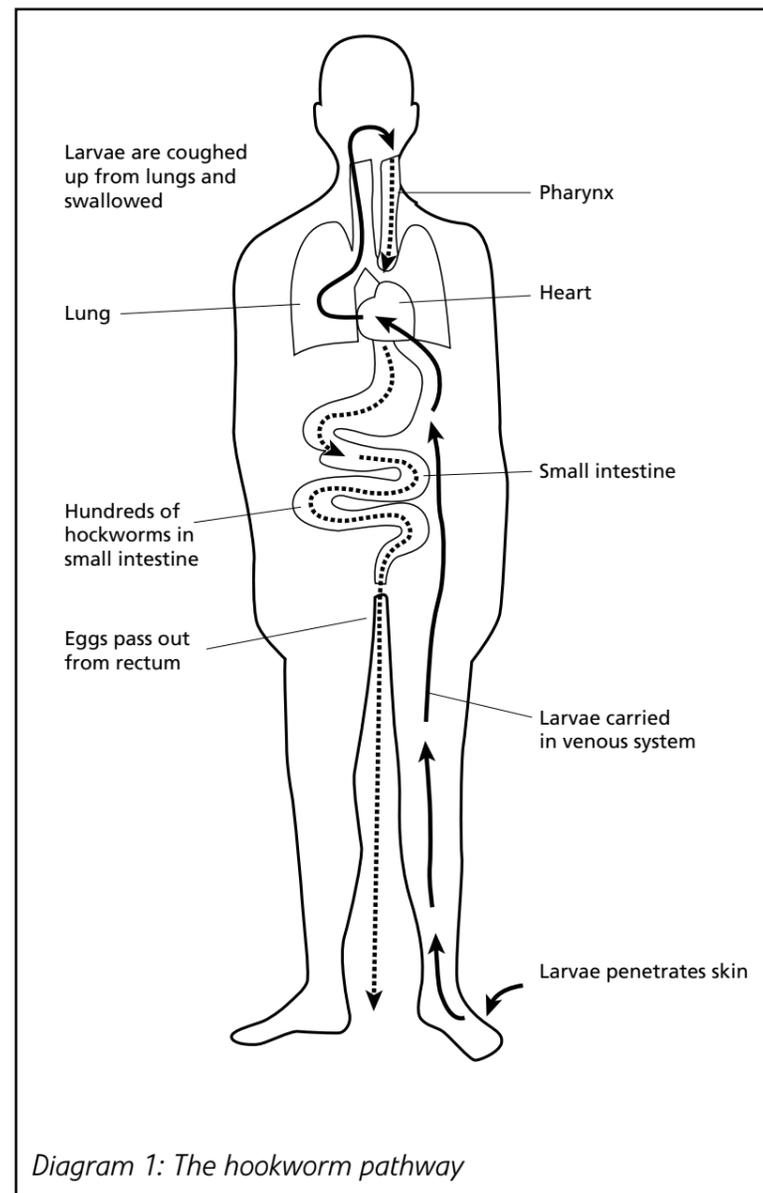
How can you prevent infection?

- The best way to avoid hookworm infection is not to walk barefoot in areas where hookworm is common and where there may be human faecal contamination of the soil.
- Wash hands with soap before eating and after using the toilet.

- Do not defecate outdoors - use a toilet.
- Improve sanitation (ie build a pit/latrine/toilet or install a better sewage disposal system).
- Promote awareness of sanitation and hygiene, specifically regarding the proper use of latrines and wearing shoes.

How can you treat infection?

- Hookworm infections are generally treated for 1-3 days with medication prescribed by your health care provider. Iron supplements may be prescribed if you have anemia.
- 'De-worming' (treating hookworm) is one of the most cost-effective ways to improve school attendance.



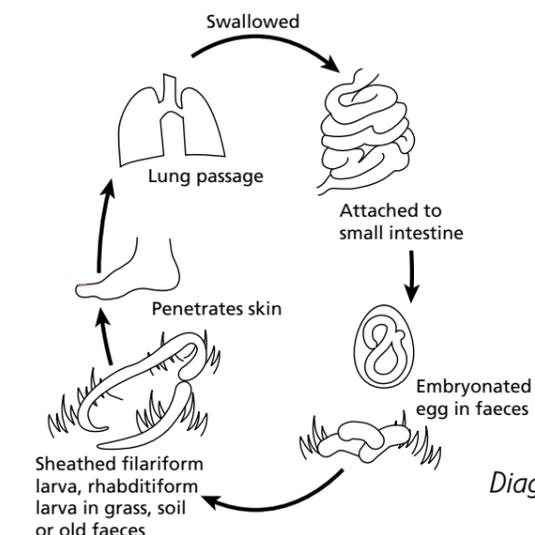
Discussion questions:

1. Look at the pictures. Discuss the causes, effects, prevention and treatment for hookworm.
2. Do you know anybody who has had hookworm? How did it affect them?
3. Sometimes we may not be able to wear shoes outside. What are some other ways we can reduce our risk of catching hookworm?
4. Where do your children play? What is the risk of them catching hookworm?
5. What should you do if you experience the symptoms of hookworm?

Follow-up activity:

Activity 4: A hookworm's journey – drama

Break into smaller groups of 3–5 people. Ask each group to come up with a drama to show the passage of a hookworm through the feet, lungs, heart, intestines and out through people's stools as eggs. Refer diagrams 1 and 2.





Body-building foods



Protective foods



Starchy energy foods

Healthy Habits

Balanced diet + exercise = 😊

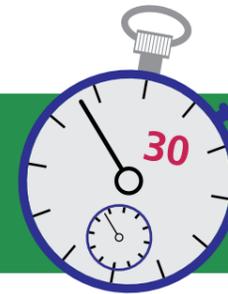
Kind

aerobic exercise: mountain hiking, gymnastics, walking, fastwalking, biking, jogging, swimming



Time

At least 30 minutes



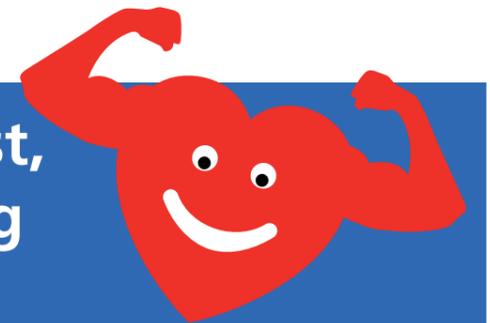
Frequency

At least 4 times a week

Mon	Tues	Wed	Thurs	Fri	Sat	Sun
✓		✓		✓	✓	

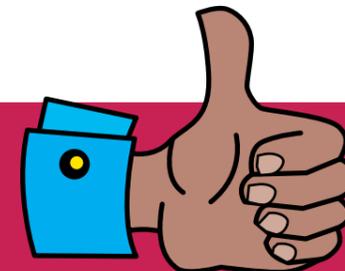
Degree

When your heart beats fast, sweats, until you can't sing but you can talk



Good

Good for health



Topic 6: Prevention – healthy habits

Learning outcomes:

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

- Discuss the meanings of ‘healthy diet’, ‘healthy lifestyle’
- Identify the key foods they should be eating on a regular basis, and those foods they need to eat less of
- Understand the importance of regular exercise

Background information for the facilitator:

There are two key ways to reduce your risk of ‘lifestyle’ diseases:

1. Diet and
2. Exercise

1. Maintaining a healthy diet¹

In the Pacific a ‘healthy diet’ refers to a balance of three food sources:

WHEN TO EAT	1. Body-building foods	2. Protective foods	3. Starchy energy foods
Eat regularly	Local fish and seafood, meat – e.g., chicken, pork, beef (visible fat removed) milk, eggs	All fresh fruits and vegetables, frozen fruits and vegetables, fresh coconut juice	Tapioca, yam, taro, plantain, green banana, breadfruit, sweet potato, potato
Eat sometimes – this food is still good, but do not have as many vitamins	Tinned fish Evaporated milk	Tinned fruits (tinned in juice), tinned vegetables (no added salt)	Bread, rice, pasta, plain noodles
Try not to eat too often – they are high in fat, sugar or salt and lower in nutrients	Turkey tails, spam, mutton flaps, corned beef, hotdogs, condensed milk	Fruits tinned in syrup, tinned vegetables (with salt added)	Ramen, pizza, fried potatoes, potato chips, doughnuts, ice-cream, cookies, cake

1. Body-building foods

We do not need large amounts of these foods – but should include a small amount at two meals a day.

2. Protective foods

These foods should be included in all meals and snacks. They are high in vitamins and minerals.

3. Starchy energy foods

These foods should make up most of the food that you eat – about half of any meal or snack.

Rice is a favourite meal in the Solomon Islands. However, studies show that people who eat at least five servings of white rice each week have a 17% greater risk of developing diabetes than those who consumed less than one serving each month. Try replacing white rice with wholegrains such as brown rice to make meals healthier.

Excessive alcohol consumption affects just about every organ in the body and can contribute to the development of many diseases. Reduce alcohol consumption. The Secretariat of the Pacific recommends a daily consumption of two standard drinks (i.e. 20 g alcohol) per person.

2. Exercise

A key component of a healthy lifestyle is being active. Many Solomon Islanders are very active. However, obesity is a growing problem in urban areas everywhere in the Pacific, including town centres like Honiara. Keeping active reduces the risks of developing many lifestyle diseases and can also help in their treatment. Being active means doing things like walking, housework, gardening or fishing – every day if possible. Do some aerobic exercise at least four times a week for 30 minutes each time. Aerobic means that your heart is beating fast and you can’t sing but you can still talk.

Smoking affects your ability to do exercise. Cigarettes contain an addictive substance called nicotine. Along with nicotine, smokers generally inhale 4,000 other chemicals. There are over 60 known cancer causing chemicals in cigarette smoke. Stopping smoking will reduce your risk of contracting a range of diseases and increase your overall health and well-being.

Discussion questions:

1. Discuss the food pictures. Is this type of food common in your family’s diet?
2. What are the barriers to not following this diet? What are some of the ways of removing these barriers?
3. What might be some ways to encourage people to adopt healthier diets, stop smoking and reduce alcohol consumption?
4. What activities do you undertake each day? What sports/tasks you do? What can you do each day to become more active?

Follow-up activities:

Activity 5: Eating plan

Draw the food type table without the food words on a large piece of paper. Using the work from Activity 1, as a group, organise the food into three areas. Discuss this table.

Activity 6: ‘Mipela strong!’ plan

1. Divide the participants into groups of 4–5
2. Ask each group to pick two activities that they wish to encourage their community to adopt to become stronger. This could be diet related: “Eat more fruit and vegetables” or exercise related: “Organise village activities”
3. Ask each group to draw the table below on a separate piece of paper.
4. Work with each group to identify key barriers/ incentives to their plan.
5. Ask each group to present their plans to the entire group.

Action 1: Eat more fruit and vegetables (example)

Barriers	Solution	Incentive
Gardens are too far away from village	Build home gardens in village	Village competition for best garden

Action 2: Encourage villagers to exercise more (example)

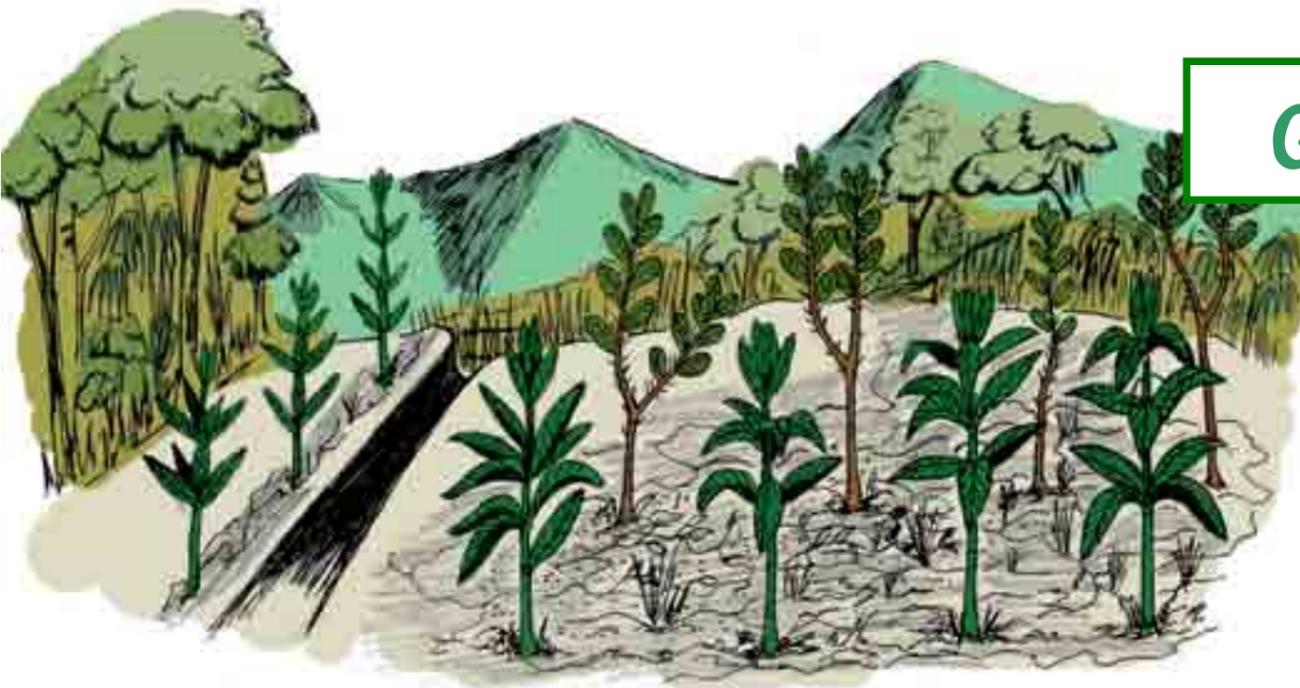
Barriers	Solution	Incentive
Limited awareness, interest and motivation to exercise more	Organise village sports day	Ask rugby league team to attend to participate; give prizes for participation

6. Challenge the participants to implement their plans.

Growing Food



Growing fruit trees and raised beds



Simple home farming methods



Staking plants

Sharing knowledge



Kitchen gardens



Topic 7: Prevention - growing food

Learning outcomes:

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

- Discuss traditional and current farming techniques in the Solomon Islands
- Discuss the challenges of securing food sources, including the effects of environmental factors on food security (eg. floods, cyclones etc)
- Compare the costs of growing food at home and buying food from the store

Background information for the facilitator:

Growing food is a key source of nutrition in the Solomon Islands' diet. Growing food can take place at home with minimal space and effort. Growing food close to home can also protect food sources. Here is some information from Kastom Gaden² on how to set up a kitchen garden.

Setting up a kitchen garden

A "kitchen garden" is a garden that is grown close to the house and ensures easy access to green leafy vegetables. The illustrations show some simple methods for small space gardens:

1. A kitchen garden, close to the house makes it easy to harvest vegetables and beans - ready to cook in the family meal. Sometimes fencing will be needed to keep out chickens or pigs. Mulch or compost need to be added to the soil regularly.
2. Young fruit trees are grown first as seedlings and then transplanted to the field. Small circles of weeds are cleared around the trees with bush allowed to grow in between them.
3. Raised beds can be a simple method for growing food close to the house. This allows you to grow food on sandy and even salty soil. You can grow greens, fruits and vegetables, bananas and root crops such as taro to make a balanced diet.
4. Root crops, such as yams, are the basic food we eat every day. They need staking to grow well.
5. Sharing knowledge: Women sharing food with children and sharing planting materials with other women.

² *Setting up a kitchen garden, Kastom Gaden Association, Solomon Islands (Source: Food technology in Melanesia handbook, Live & Learn Environmental Education)*

Traditional farming methods in the Solomon Islands

In some parts of the Solomon Islands, traditional gardens are usually two to three hours walk from the village to the plantation. As most of the arable farm lands close to the villages are normally occupied by coconut and cocoa plantations, farmers are forced to farm far away from their villages. Most of the food in the families' diets is sourced from these gardens. It is common in the Solomon Islands to find taro and vegetable gardens deep inside forested areas. Given that most farmers attend and gather food from their gardens at least twice a week, most of the meals prepared at home are without healthy vegetables. Since most of them are eaten up as soon as they are bought in.

Benefits

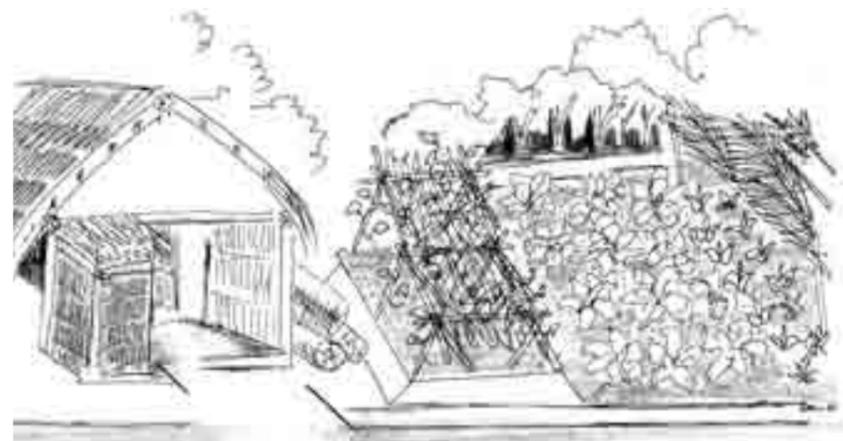
- Have access to vegetables and greens everyday
- Women do not have to walk hours to get vegetables for meals
- Families have a well-balanced diet
- Save money

Materials

- Farming tools
- Sticks for fencing

Method

1. Clear area for the garden
2. Use the sticks to make a fence around the garden
3. If you don't have good soil, transfer soil from the gardens and mix with chicken manure.
4. Plant seeds or seedlings.
5. Don't forget to weed and mulch regularly.



Discussion questions:

1. Where are your communities' gardens?
2. Are they close to your village?
3. Look at the pictures – discuss how these methods differ from how your village/community grows food.
4. What types of foods could you grow at your house?
5. Share with the group, other methods of securing food sources close to your homes.



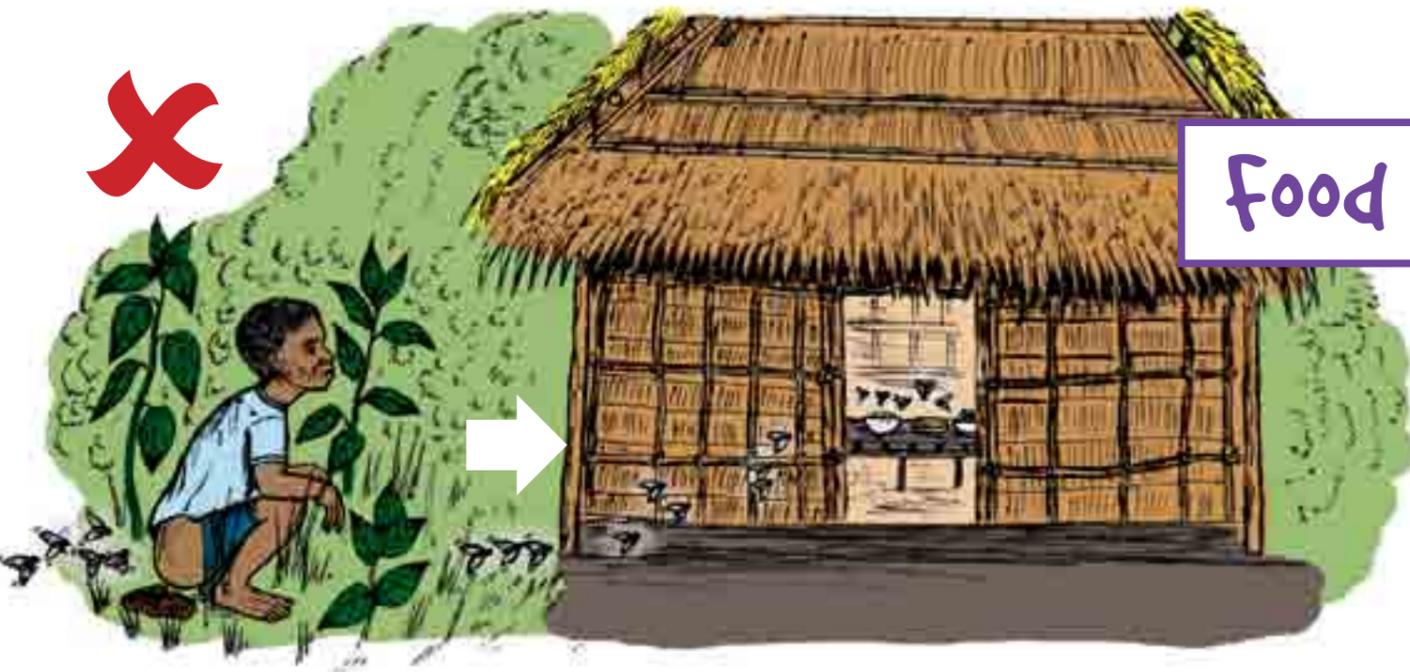
Follow-up activities:

Activity 7: Money grows on leaves!

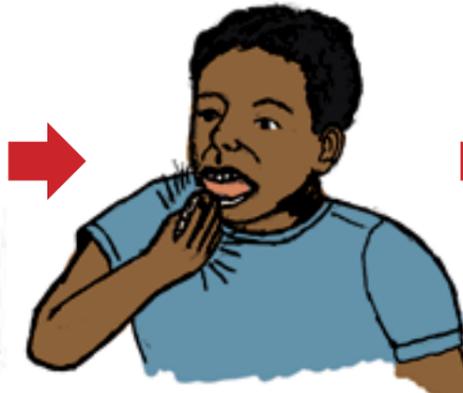
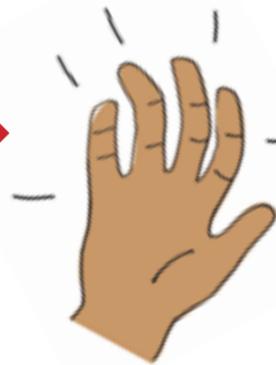
In most cases, it is much cheaper (and healthier) to grow plants at home, rather than to buy them from a market, or to buy other food (such as Taio and rice) from the store. As a group, choose the three key food items eaten by the participants, and calculate the household cost of eating these foods for an entire year. Choose a popular Solomon's vegetable (eg. slippery kabis, kassava, taro etc). Calculate the cost of growing these vegetables at home. If possible, ensure that you list the number of labour hours to grow these vegetables. Discuss these findings as a group.

Activity 8: Growing a garden

If possible, set up a kitchen garden (following the instructions on this page). This will need some preparation prior to the workshop.



Food safety



Five simple steps to clean your hands



1. Wet hands



2. Soap



3. Scrub backs of hands, between fingers, under fingernails



4. Rinse



5. DRY hands on a clean cloth

Topic 8: Prevention – food safety

Learning outcomes:

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

- Highlight that germs are everywhere, and can cause conditions like diarrhoea
- Understand the importance of clean and safe food and water
- Know when to use hygienic practices (like handwashing with soap)
- Demonstrate knowledge of handwashing techniques

Background information for the facilitator:

Infectious diarrhoeal and parasitic diseases remain a major cause of illness, and even death, in many Pacific countries. Many of these diseases can be caused by consuming contaminated food and water. How we store, handle, prepare and serve our food is very important for our family's health. This is referred to as 'food safety'. Unsafe food and water means that it has been exposed to harmful germs that can cause infections or diseases.

Germs are everywhere!

Germs are tiny organisms, or living things, that can cause disease. They are invisible to the human eye and can only be seen under a microscope. Germs are everywhere – even in our bodies – in which they survive by using our nutrients and energy. The toxins they produce can cause infections and symptoms such as fevers, running nose, rashes, coughing, vomiting, and diarrhoea.

Diarrhoea is one of the biggest killers of children under five in the Pacific, and the world. Diarrhoea is defined having three or more loose or liquid stools per day. Diarrhoea is usually a symptom of an infection in the intestinal tract, which can be caused by bacterial, viral and parasitic organisms. The infection can be passed on through contaminated food or drinking water, or from person-to-person through poor hygiene.

Diarrhoea can last several days, and can leave the body without the water and salts that are necessary for survival. Most people who die from diarrhoea actually die from severe dehydration and fluid loss. **A mixture of water, salt and sugar can help replace lost fluids due to chronic diarrhoea.**

Use a toilet

Germs and parasites can live in faeces. To help prevent the spread of germs and parasites, avoid defecating in the open. Use a toilet or bury your waste.

Handwashing with soap

Washing hands with soap is the best defence against germs. The biggest killer of kids under five in the world is pneumonia. Diarrhoea is the second

biggest killer of kids under five in the world. It is estimated that handwashing with soap can reduce the incidence of pneumonia-related infections in children under the age of five by more than 50%. Handwashing with soap can reduce the incidence of diarrhoeal disease by more than 40% (UNICEF, 2009). This simple act can have an immense impact on the number of young children dying unnecessarily around the world. Handwashing with soap after using the toilet and before touching food is one of the best ways to reduce the incidence of diarrhoea

When should you wash your hands?

- Before and after preparing and eating food
- After going to the toilet
- After changing diapers or cleaning up a child who has used the toilet
- Before and after tending to someone who is sick
- After blowing your nose, coughing, or sneezing
- After handling an animal or animal waste
- After handling garbage
- Before and after treating a cut or wound

Handwashing High-Five!

Here is a simple way to remember to wash your hands with soap:



1. WET hands with water



2. SOAP hands all over



3. SCRUB for fifteen seconds



4. RINSE with plenty of water



5. DRY your hands on a clean cloth

Discussion questions:

1. Look at the pictures. What do you think is happening?
2. What are some things we can do to make our drinking water safe?
3. What are some things we can do to make our food safe?
4. What are some things we can do to reduce risk of infection?
5. When should we wash our hands with soap?
6. How long should you wash your hands for?
7. What do you do when there is no soap? (can use wood ash).
8. What are some of the barriers to washing our hands with soap? What are some of the things that limit regular handwashing with soap? (No soap, no water, no tap, no awareness, hands don't "look dirty").



Follow-up activity:

Activity 9: Handwashing high-five!

Now is a good opportunity to demonstrate the five key handwashing steps discussed above.

(Refer to Live & Learn's hygiene behaviour resources for more activities)

References

¹ The Secretariat of the Pacific Community Public Health Unit has produced a range of materials on healthy lifestyles and healthy diets specific to the Pacific. This information is sourced from: SPC Factsheet no.16: Healthy Eating, and SPC Factsheet no.17: Healthy Lifestyle. Fact sheets are available at www.spc.int

² Setting up a kitchen garden, Kastom Gaden Association, Solomon Islands (Source: *Farm Technology, Protecting food security through adaptation to climate change in Melanesia*, Live & Learn Environmental Education, 2011, pp. 117–118)