

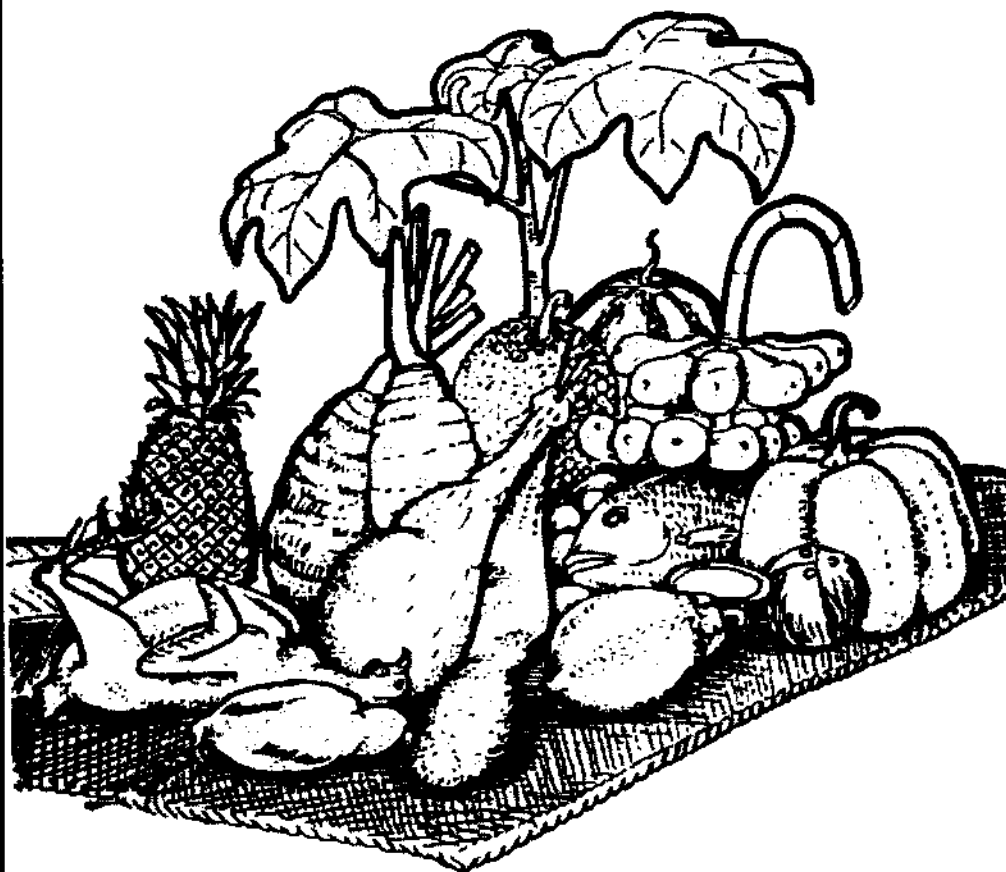
ENVIRONMENTAL STUDIES

NUTRITION

Teacher's Book

Year 5

FINDING OUT ABOUT OUR ISLAND FOOD



**DEVELOPED JOINTLY BY:
THE MINISTRY OF EDUCATION,
HEALTH,
AGRICULTURE
AND UNICEF.**

CURRICULUM DEVELOPMENT CENTRE OF VANUATU

TEACHING NUTRITION IN THE ENVIRONMENTAL STUDIES CURRICULUM YEAR 5

Summary of the lessons

Our foods and nutrition

In Year 5 the students continue to revise the three food groups. The students also look at what happens to food inside our bodies, at how different members of the family have different food needs. The latter includes learning about what foods babies need, what foods young children and school children need, what foods pregnant and lactating mothers need, and what foods adults need depending on their daily activities.

Meal planning is also revised.

Clean food and clean food preparation is included in Year 5, especially how germs can travel into our bodies if food or food preparation is not clean.

Lastly budgeting is introduced in Year 5. Students will be shown how to select foods economically and how to make sure they have enough money to buy food for a family.

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year 5
term 1

Lessons 1, 2, 3 and 4 : The Three Food Groups and Balanced Meals

Objective of the lesson

To revise the Three food groups, balanced meals and good and poor food choices.

Time needed 4 x 30 minutes

Materials needed

1. Three food groups poster - available from Nutrition Section, Port-Vila.
2. Nutrition Bingo - available from Nutrition Section, Port-Vila.
3. Three food groups card game - available from Nutrition Section, Port-Vila.

Teacher's notes

In years 3 & 4 the students were introduced to the concepts that we need food for many reasons - i.e. because we are hungry, for feasts and celebrations and to keep our bodies healthy. The three food groups and balanced meals concepts were taught ; we need to eat food from each of the three food groups everyday in order to stay healthy. The three food groups are:

- Body building or growth foods to help us grow and stay strong.
- Energy or power foods to help us move, work and play.
- Protective or health foods to help us prevent sicknesses and stay healthy.

A list of Vanuatu foods belonging to each food group is shown on page 5 to help you with the lessons throughout Year 5.

In Year 5, the students also learn how to choose good meals using fresh and store foods. Fresh foods should be the first choice for making balanced meals as they are often available free from the garden, bush or sea, but it is also possible to make good choices from the store and market to make up a balanced meal when fresh foods are not available.

Method

1. Show the students the three food groups poster to remind them of the three food groups. Ask them to name the three food groups. Write the names of the groups on the board as students name them.

LIST OF FOODS IN VANUATU IN THEIR THREE FOOD GROUPS

<u>BODY BUILDING AND GROWTH FOODS</u>	<u>HEALTH FOODS</u>	<u>ENERGY OR POWER FOODS</u>
Pork	Island cabbage	Yam
Beef	Pumpkin Tops	Fiji taro
Chicken	Ferns	Dry coconut
Fish	Beans	Coconut cream
Shellfish	Pumpkin	Manioc
Eel fish	Carrots	Kumala
Octopus	Tomato	Water-taro
Land crab	Cucumber	Corn
Coconut crab	Avocado	Breadfruit
Flying fox	Guava	Cooking banana
Wild duck	Mango	Potato
	Lychee	Wild yam
Pigeon	Orange	Rice
Nagae	Lemon	Bread
Natavoa	Custard apple	Sugar-cane
Peanut	Soursop	Butter
Turtle meat	Water-melon	Margarine
Egg	Pineapple	Cooking oil
Goat meat	Nadao	Sweet yam
Prawns	Naus	Strong yam
Lobster	Green coconut	Cabin biscuit
Tinned fish	Nakavika	Sao biscuit
Tinned meat	Pawpaw	
Milk powder	Kumala tops	
Cheese	Taro leaves	
Dry beans	Watercress	
	Germinating coconut (Navara)	
	Choko leaves	
	Wild chili leaves	
	Seaweed	
	Passion fruit	
	Capscium	
	Chinese cabbage	
	Grapefruit	
	Ripe banana	
	Lalas leaves	

2. Discuss the functions of each food group.

- Body building or growth foods help our bodies to grow and to stay strong.
- Energy or power foods give our bodies energy to work and play. It is like giving us "fuel" to move. It is like giving petrol for a car or motor boat to go.
- Protective or health foods help our bodies fight sickness. This is one of the most important food groups. Everyone needs to eat protective foods every day.

3. Ask students to give examples of foods in each group. Write them on the board as students name them and tell you which group they belong to. This can be made into a game:

Divide the students into two teams, e.g. students sitting on the left and right sides of the classroom. Ask the first team to name a food. The second team should then say which food group the food belong to. If the second team is right, they gain one point and the first team must name another food. If the second team is wrong, they do not get any points. The first team should tell the second team the correct food group. Then the second team gets to name another food, and the first team must try to identify its food group. Teams get one point for each correct food group named. The team with the most points wins.

4. You can use the food mobiles or posters the students prepared in years 3 and 4 to help the students review which foods belong in which group, or they can make new mobiles or posters (see instructions from years 3 and 4 on pages 10).

5. Have the students do some of the activities they learned in years 3 and 4 to revise the three food groups and make good food choices. Choose as many as you have time for from the student activity list below. You can include these activities throughout the year when you have time.

6. Have the students act out the three food group play (see pages 13 and 14). When the students have practised it a few times, they can dress up and perform the play for the rest of the school or the parents. It is a good activity to include in any end of year celebrations. Also, talk to the years 3 and 4 teachers about the play. They may find it useful to have your students perform the play to their students when they are learning about the three foods groups.

7. Play the new food group game "Four legged race" (see page 11).

Student activities

a) To revise the three food groups

1. Sing the three food groups song (see page 7).

2. Play the three food groups relay race (see page 8).

3. Make new three food groups mobiles (see instruction on page 10).

THE THREE FOOD GROUPS SONG

(Tune of: "If you are happy and you know it clap your hands")

1. If you know the three food groups clap your hands!
If you know the three food groups clap your hands!
Healthy Helpers, power and grow
Give us all we need and so,
If you know the three food groups
clap your hands!
2. Now to study, work and play
We need power FOODS!
Now to study, work and play
We need POWER FOODS!
Foods like yam, rice and taro,
Sweet kumala, baked or boiled,
Now to study, work and play
We need power FOODS!
3. So we'll get big and strong
We need GROWTH FOODS!
So we'll get big and strong
We need GROWTH FOODS!
Foods like peanuts, fish and beans,
Meat and eggs and milk and greens,
So we'll get big and strong
We need GROWTH FOODS!
4. Oh to help fight sickness
Eat some HEALTHY FOODS.
Oh to help fight sickness
Eat some HEALTHY FOODS.
Orange, Yellow, Red and Green
Fruits and vegetables we need.
Oh to help fight sickness, eat some HEALTHY FOODS.

HOW TO PLAY THE "THREE FOOD GROUP RELAY GAME"

Teacher's instruction

What you need for the game:

Foods from the three food groups.

Number of teams

- Three teams, each team representing one of the three food groups, for example:

- . One team - Body building and growth
- . One team - Health
- . One team - Energy and power

What to do

1. Divide the class into three teams and ask each team to bring foods from one particular group. For example:

- Team 1 bring foods from the health food group.
- Team 2 bring foods from the body building food group.
- Team 3 bring foods from the energy food group.

2. The students are to remain in their teams when playing the game. Line up the students outside the classroom. Put all the foods that have been collected and that have been thoroughly mixed together about five metres from where the students are standing.

3. Rename the teams so that students belong to different food groups from the ones for which they brought foods.

- Team 1 - Energy food
- Team 2 - Health foods
- Team 3 - Body building

It is a good idea, to write the names of the three food groups on large pieces of paper and place them in front of each team.

4. Now that the students know to which group they belong, they can start playing the game. You will tell the students when to start.

5. As soon as you say "GO" one student from each team runs to the food pile at the front, collects one food from her food group and runs back to the group. She places the food in front of the line, touches the next person in the line, runs to the end of the line and stands there. As soon as the next student is touched, he runs to the pile of foods and repeats the procedure. This continues until the last student on the line has her turn. As soon as the last person takes her place at the end of the line, the team sits down on the grass.

The winner is the team which collects all the correct foods and finishes first.

During this game it is important that the number of students in each team is the same and also that there are enough foods from each food group for each team member.

The game could be repeated three times so that each team can have a turn as each of the three food groups.

This is a very good game to help students learn the three food groups and the foods which belong to each group.

To make food mobiles:

i) Divide the students into four groups. One group will make power or energy food mobiles; one group will make body building food mobiles; one group will make protective or health food mobiles; and the fourth group will make food mobiles showing a balanced meal.

ii) Using paper or cardboard draw a good size picture of a food and colour it. Then cut it out with a pair of scissors. Make a hole at the top of the cut out. Thread the food with a rope or string and tie it onto a stick. The stick then can be tied to the ceiling of the classroom with all the foods hanging from it.

iii) Label the food mobiles by attaching a paper to the stick with the name of the food group written in big capital letters, or by tying the label to the stick and allowing the label to hang lower than all the food mobiles.

For clarification see illustrations below:

FOUR-LEGGED RACE

Materials needed

One piece of paper per student.
rope twine or strips of material

1. Divide the class into three equal groups. If there are one or two students left over they can be the starter and finish judge for the race.

Name group 1 Body Building, group 2 Energy and group 3 Protective. Have the students draw a picture of a food from their food group and write down the name of the food group on a piece of paper which they can attach to themselves, e.g. back or chest or hold in their hands.

2. Ask the students to group together in three's to make up a balanced meal, i.e. one person from Protective group, one from the Body Building group and one from the Energy group.

3. Tie the ankles of students together so that they are all facing the same way. Students should link arms and the middle student will have both legs tied to his or her to partners.

i.e. Energy

Body Building

Protective

Use rope, strings, vines or large hankies or pieces of cloth strip to tie ankles. Do not tie them too tightly or the students will hurt themselves.

4. Ask the groups to line up at one end of the school yard, so the groups can race against each other to a finish line you select. (Don't make the course too long as this is quite a difficult game.)

5. Students will soon find out that they must co-operate and work together if they are to walk with 'four legs' and not keep falling over! The first group to cross the finish line is the winner.

b) To revise balanced meals and good food choices

1. Sing the island food song.
2. Play the ring toss games (see page).
3. Play the three group card game (see page).
4. Play Nutrition Bingo (see page).

ISLAND FOOD

Chorus

Island food, it is so good;
Eat it up you know you should.
Rubbish food it is so bad -
Wasting Vatu makes you mad.

1. Eat local food and you will see
How very healthy you will be.
Vanuatu people long ago
Believerd that this was always so.
2. Taro and fish are good to eat -
Soup with vegetables and lots of meat -
With pawpaw and mango you can't go wrong.
Eat island food and you'll be strong.
3. Sugar and cordial are bad for you.
Lollies and Twisties are no good too.
Your teeth will rot and you'll get fat
Sleeping the day away on your mat.

6. The main teaching point for this game is that we need all three food groups to work together in order to work properly. Our bodies will not stay healthy if we only have one group working on its own.

NOTE: Warn the students that it is difficult for the person in the middle to walk without co-ordination with his or her partner. They should be careful not to pull each other over and hurt themselves. It is a good idea to let the middle person lead the other two. The teams should practise walking together before the race.

NUTRITION PLAY: 3 FOOD GROUPS

Peanut: (singing) Woayh.... I am the biggest. I am the best.
My group is better than the others. We are the best
and can beat everyone.

Kumala: What are you saying? My group is the biggest and the
best. Everybody likes us. Kumala are Vanuatu food.
My group is all over the country as well. Everyone
knows us.

Peanut: I can show you that my group is the best. Listen to
what I say about my group.

Kumala: What is your name?

Peanut: My name is peanut. My group is called growth foods.
All the foods in my group are very strong. Their
names are pig, chicken, tinned fish and meat, green
beans, peanuts. We are better than anyone else.

Kumala: How often do people eat you?

Peanut: They must eat us everyday. Some people do not eat us
and then they get sick and some die. What is your
name and what group do you belong to?

Kumala: My name is kumala and my group is called energy
foods. Other foods in my group are yam, taro, corn,
sugar-cane and manioc from the garden, and rice,
bread, cabin biscuit, butter and cooking oil from
the store.

Peanut: How often do people eat you?

Kumala: People must eat us three times every day. Everybody
like us. That shows that we are strong. If people do
not eat us at meal times, they will feel hungry,
they will not be filled up.

Peanut: But you know, pig is the best food. Everybody likes
pig best. They do not like only kumala.

Kumala: When you cook pig you cook kumala, too. If you do
not have pig to cook, what will you eat?

Peanut: Kumala

Island Cabbage: (singing) I am the best of my group. I am
the best in Vanuatu. I..... (island cabbage looks
at the other two and stops singing)

Peanut: Why are you singing that? I am better, who are you?

Island Cabbage: I am Island cabbage. I am from the garden, in the market, and in everyone's place. I make everybody strong, help everybody fight sickness. I make everybody's blood strong.

Kumala: What group do you belong to?

Island cabbage: Protective foods. Others in my group are all the other traditional dark green leaves like pumpkin tips, leaves of the taro, kumala, susut, watercress and a lot more plus fruits like orange, pineapple, ripe banana, pawpaw, and green coconut.

Kumala: You are a good group. But do you help people get strong or work hard in the garden?

Island cabbage: No, I like to help other groups make people strong enough to work in the garden. But, kumala, do you make people's blood strong or protect them from getting sick all the time?

Kumala: No, I like to help other groups do that. Peanut, do you protect people from getting sick?

Peanut: No! I like to help other groups, too, I make bodies grow. Wait ... I know ... We all must help each other. One group is not strong enough to do everything.

Island cabbage: Yes. We all must work together to help the people of Vanuatu become strong and healthy.

Kumala: We are three groups and all of us together help everybody: babies, children, men and women. We must work together all the time.

All: Every kind of food is good food.

Characters : Island Cabbage
Kumala
Peanut

Lessons 5, 6, 7 & 8, DIGESTION

Objective

To learn what happens to food inside our bodies.

Materials needed

Large poster of digestive system

Health lessons on the digestive system.

Time needed 4 x 30 minutes

Teacher's notes

Digestion is very difficult to teach in a practical way, particularly for children at Year 5 level. It is very abstract. A lot of the detail of the main concepts you should aim to teach is given here in the method. You should refer also to the health lessons on the digestive system.

Method

1. Remind the students that they have learned that there are three kinds of foods we need to eat each day to keep our bodies healthy - body-building, energy and protective foods.
2. Tell the students that there are many different kinds of food in each food group, e.g. oranges and island cabbage are different foods but they belong in the same food group (protective). Taro is quite different from rice but they are both in the energy food group. The reason we group foods together is that they contain the same things that do the same kind of work in our body.

For example :

Taro and rice look and taste different but they both contain the same things to make our bodies move, work and play, so they are both called ENERGY FOODS.

Oranges and island cabbage, look and taste different but they both contain the same things to keep our bodies healthy and stop us getting sicknesses so they are called PROTECTIVE FOODS.

Pig and fish, look and taste different but they both contain the same things to help our bodies grow and stay strong and so they are called BODY BUILDING FOODS.

These 'things' in foods are called NUTRIENTS. This is a new word to learn.

3. Write the word NUTRIENTS on the board and tell the students to copy it into their exercise books. Explain to the students that these are three kinds of nutrients:

- a) body building nutrients which are called PROTEINS.
- b) Energy nutrients which are called CALORIES.
- c) Protective nutrients which are called VITAMINS and MINERALS.

Write these sentences on the board and have the students copy them into their books.

- 4) Tell the students that it is these nutrients that our bodies use to grow, stay strong, move, play and stay healthy.
- 5) Ask one student to name his or her favourite garden food, e.g. sweet potato. Ask the students if they have ever thought about what happens to the sweet potato when they eat it? Ask if the sweet potato appears as part of our body after we have eaten it.
Answer: No, it goes inside our mouth and disappears.
- 6) Tell the students we have learned that by eating food we can grow, move, work and play and fight sicknesses and that it is the nutrients in food that help our bodies do this. When we eat food our bodies have to extract or take out the nutrients and use them to perform all these tasks. When we eat fish or pig, for example, we put the meat in our mouths and our bodies must take out the bodybuilding nutrients (Proteins) to use them to grow and keep strong. This process is what we call DIGESTION.
7. Tell the students to write the word DIGESTION in their workbooks. Write the following chart on the board for the students to copy into their books.

FOODS

DIGESTION

NUTRIENTS

BODY USE

Here are some examples of what happens to specific foods.

PIGS = BODY - BUILDING FOOD

DIGESTION

BODY - BUILDING NUTRIENTS = PROTEIN

BODY GROWS and STAYS STRONG

TARO - ENERGY FOOD

DIGESTION

ENERGY NUTRIENTS = CALORIES

BODY CAN MOVE, WORK and PLAY

ISLAND CABBAGE = PROTECTIVE FOOD

DIGESTION

PROTECTIVE NUTRIENTS = VITAMINS and MINERALS

BODY STAYS HEALTHY and FIGHTS SICKNESS

8. Tell the students they will learn more about digestion.

Show them the picture of the digestive system. If you have the large poster, pin it to the wall.

Point out each of the parts of the digestive system and tell the students that all the parts of the digestive system except our mouth are deep inside our bodies and we cannot see them.

Explain what happens to a piece of food once it has entered the body through the mouth.

a) Food gets put inside our mouth and we chew it up into small pieces with our teeth.

b) Food is swallowed and passes down a long tube to our stomach. The stomach is right below the ribs on the left side. The food is mixed with lots of liquid and broken down into even smaller pieces.

c) The liquid food then passes into a very long tube called the intestine. It is very long and wound round in lots of loops so that it fits inside our bellies. Inside the intestine the food is attacked by special substances made inside the body so that it breaks down into even finer pieces, and all the nutrients are released. The body takes all these nutrients to help it move, to make it grow and to provide some protection against getting sick.

d) After all the nutrients have been removed from the food some material remains that the body doesn't need. This is passed out of the body as solid waste.

9. You can conclude the lesson by reminding students of the following important points about DIGESTION. Students should write these points down in their exercise books.

a) DIGESTION is important so that our bodies can get the nutrients from food. Our bodies need these nutrients for growth, energy and protein.

b) DIGESTION means breaking food into small parts and taking out the useful nutrients that make the body work and stay healthy.

c) Food enters the mouth and passes through the digestive system. Digestion takes place so that only waste food is passed out. The body takes out all the useful parts of food that it needs to stay healthy.

STUDENTS ACTIVITIES

1. Photocopy the following puzzles about digestion or draw them on the board for the students to answer.

a) Digestion crossword

Fill out the spaces from the list of words below:

LESSONS 9, 10, 11 and 12; DIFFERENT FOOD NEEDS FOR DIFFERENT MEMBERS OF THE FAMILY

Objective

To learn the different food needs for different members of the family.

Time needed 4 x 30 minutes

Teacher's notes

We eat because we feel hungry. Feeling hungry is a message that tells us that our body needs food. Unfortunately the feeling of hunger does not tell us what kind of food is needed to keep us strong and healthy. We have to decide for ourselves what kind of food we should eat. The various members of the family have their own special food needs because they are all different sizes, different sexes and do different activities. Certain members of the family need special care and attention to make sure they are eating plenty of good, nutritious foods. Babies, young children and mothers who are breast-feeding or who are pregnant need special foods to stay healthy and strong.

Method

1. Ask the students to remember the main reasons we need food.
Answer: To stop us feeling hungry.

To provide NUTRIENTS for body building, energy and protection and to keep the body healthy.

2. Remind the students that they have looked at the kinds of foods we need to eat. Now they will look at the amount of food we need and the special requirements we have at different times of life.

Ask the students:

- Do you eat as much food as your baby sister, brother or cousin.
Answer:
No: He/she drinks breast milk and only small amounts of soft foods.
- Do you eat as much as your father or brother or uncle who works hard in the garden all day.
No: We are much smaller and do not work as hard and so we need less food to eat. Our stomachs are smaller too.

3. Show the following series of pictures and read the text that goes with them aloud.

(Picture of a woman who is expecting another baby) .

A woman has special food needs when she is pregnant. She must eat extra body-building foods to help make the baby grow inside her. She needs extra energy and protective foods to help her carry on working and to protect herself and the unborn baby from sicknesses.

(Picture of a breast-feeding woman) .

A woman who is breast-feeding needs to eat extra foods too. She needs this extra food to help make good milk for her baby.

(Picture of a new born baby breast-feeding)

Babies need only breast milk until they are 4 months old. New born babies should drink as much breast milk as they want.

(Picture a three-year-old child)

Young children aged 6 months to three years will gradually need more food in addition to breast milk. Three-year-old children are growing fast so they need plenty of body-building foods.

(Picture of a school child)

School age children are very active and are growing fast. Running and playing use lots of energy foods. Growing up and staying healthy take many body-building and protective foods.

(Pictures of adult men and women - two working in the garden, two working or sitting in an office)

| An adult man, because, he is bigger, needs more food than a woman who is not breast feeding or pregnant.

Adult men and women who work very hard in the garden need extra energy foods so that they can perform their work well. People sitting in an office all day will not be very active so they need less energy food than active gardeners or fishermen.

(Picture of an elderly person)

✱ Elderly people often need less food than younger adults because they are not active. If they may have no teeth, their foods need to be soft or mashed.

Show the picture of all the people mentioned on pages 23 to 38 and point the following points to the students:

- We can see that each individual member of a family will have his or her own special needs for foods because they are all different sizes, different sexes and do different activities.

4. Write the following on the board and tell students to copy it into their exercise books.

How much and what kinds of food a person needs to eat depends on the answer to the following questions:

- How old is the person?
- How big is he or she?
- What does the person do for work and play?
- Which sex is the person?
- If a woman, is she pregnant or breast feeding?

5. Show the picture of a family on page 38, and ask the students to say why all the family members have special food needs.

Answer:

In this family there are:

- mother who is breast feeding;
- father who is a fisherman;
- new-born baby
- grandmother

They have the following special food needs:

- Mother must make good milk for her baby and do all her other work looking after the family.
- Father has to work hard paddling his canoe and fishing.
- Grandmother cannot walk much and is not very active and so needs to eat less food than when she was a young woman.
- Baby needs breast milk only.

6. Split the class into seven groups. Tell each group to draw and make a poster of one of the different age groups shown in the picture card and to write the special food needs next to the picture, i.e. each group in the class works on a different age group. Help the students to copy the text for their pictures from your book.

You will end up with seven posters as follows:

- pregnant woman
- breast-feeding woman
- new-born baby
- three-year-old child
- school age child
- adult man and woman
- elderly person.

Pin the posters to the classroom wall or hang them from the ceiling. They will help you and the students in the next activity and the next series of lessons.

7. Tell the students to list the members of their families and the main tasks each does in their notebooks . Help them to identify the special needs of each of their own family members.

Tell the students they will learn about these special food needs in more detail in the next series of lessons.

Student activities

Family members puzzle

Find the names of different family members and circle them in the puzzle below.

Baby
School child
Adult
Elderly
Pregnant
Breast feeding

Answers to the family members puzzle

EVALUATION

Teacher's note

1. The aim of this evaluation is to see whether the students have understood the content of the lessons.

You can carry out the evaluation in the following ways .

- a. If you have access to a photo-copying machine and paper you can photocopy the tests for each student. If you have access to a stencil machine you can prepare your own stencil and run off copies for your students.

Or

- b. You can write the test on the blackboard and ask the students to write only the answers of each question in their exercise books or on pieces of paper which you will have to collect for marking at the end of the test.

For example:

1. - a) Yes
- b) Yes
- c) No etc..

Or

- c. You can write the test on a big piece of blank paper and put it up on the board or wall and ask students to write the answers of each question in their exercise books or pieces of paper for you to collect and make them at the end of the test.

For example:

1. - a) Yes
- b) Yes
- c) No etc..

Or

- d. You can read questions to the class. You will have to repeat each question three or four times. The students will only need to write the answers as in examples given in points b and c above.
2. The length of time needed to spend on each test is stated, however, you can adjust the time to suit your need.
 3. The total mark for each question and the whole test is also stated. Here again you can adjust the marks to suit your school's particular marking system.
 4. The answers for the nutrition end of term test are on page 46.

End of term 1 nutrition

Test

Question 1

Complete the crossword with the words that the clues provided below:

Across:

1. Body-building nutrients
3. Energy nutrients
5. Protective nutrients beginning with the letter "V"

Down:

2. "Things" in food to make us grow, move and stay healthy.
4. Protective nutrient beginning with the letter "M".

(10 marks)

Question 2

Fill in the blanks using the right words from the box below

a) One of the main reasons we need to eat food is to

_____ (2 marks)

b) A pregnant woman must eat extra _____ foods
make the baby grow inside her.

(2 marks)

c) Babies need only _____ until they are _____
old.

(4 marks)

d) Our food is broken down in our stomachs into very small
pieces for our bodies to use; we call this process

_____ (2 marks)

- . provide nutrients to keep us healthy
- . digestion
- . six months
- . four months
- . breast milk
- . energy
- . body-building
- . protective

/20

END OF TEST

Answers to End of Term 1 Nutrition test

Question 1

(10 marks)

Question 2

a) provide nutrients to keep us healthy.

(2 marks)

b) body-building

(2 marks)

c) breast milk, four months

(2 marks)

d) digestion

(2 marks)

/ 20

LESSONS 13, 14, 15 and 16; FOODS FOR BABIES

Objective

To learn about foods babies need.

Time allowed 30 minutes x 4

Preparation needed

- Trace pictures on pages 48 for student activities.
- Write baby's letter on a big piece of paper.

Materials needed

Givim titi poster. (Could be obtained from the Nutrition Section, Health Dept., Private mail bag 009, Vila.)

Teacher's notes

Learning what foods babies need is very important because babies grow up to be adults. We must give babies proper food so they become healthy adults. A baby's first food is breast milk. This is an excellent source of nutrients and the best food for baby. Breast milk alone is enough for the baby for the first few months of life. It contains all the goodness a healthy baby needs. If all babies are to be healthy and grow they must be fed breast milk.

Here is a brief note on bottle feeding for your information especially if a student tells you his or her baby is being bottle fed. Bottle feeding is not very good for baby because it is not as nutritious as breast milk feeding. Breast milk contains all the nutrients that the baby needs whereas bottled milk and baby formula not. Bottle feeding also is very expensive and a lot of work is needed to prepare the milk properly. If the mother does not prepare the bottle feeds properly, her baby can become very sick.

Breast milk is cheap and is always clean and ready for the baby.

Breast milk alone is enough to keep babies growing properly until they are four - six months old. Beyond that age babies grow so fast that breast milk by itself is not enough. Babies need other foods if they are to keep growing and stay healthy. They can be given soft foods when they are four months old. They should continue to drink milk as well as soft foods. Babies should continue breast feeding for as long as possible and increase the amount of solid foods as they grow bigger. Babies should breast feed until they are at least two years old.

Method

1. Tell the students:

In our last lesson we found out that different members of the family have different food needs. In this lesson we will learn more about food needs for babies.

2. Ask the children the following questions while you show the pictures of the baby animals (see page 49):

- a) What food does a calf eat?
 - A new born puppy?
 - A baby kitten?
 - A baby goat?
 - A piglet?
- b) Do calves drink dog's milk?
Do kittens drink pig's milk?

3. Show the picture of the mother breast feeding her baby and tell the students:

Mother's milk is the very best food for babies. It is a very special super food that babies love to drink. It makes them grow strong, healthy and happy. Mother's milk is very special because it is an energy or power food, body-building or growth food and a protective or health food all in one. Until a baby is about four months old, it needs no other food but mother's milk.

4. Show the children the picture of a mother breast feeding her baby on page 50 or the Vanuatu breast feeding poster (Givim titi). Tell the students to write the following sentences in their exercise books:

- Mother's milk makes a baby grow big and strong.
- Mother's milk gives a baby lots of power or energy.
- Mother's milk helps a baby fight sickness and stay healthy.

5. Tell the students:

- When a baby is four to six months old it begins to need more food than mother's milk. Soon the baby will be big enough to eat the same foods we eat, so babies of about four months must start to eat other foods.

- Of course the baby still needs mother's milk and can continue drinking it until he is about two years old.

- So in addition to mother's milk a baby of four months should eat other foods.

6. Select two students to present the play "Introducing soft foods to four-month-old babies" on page 53 and 54.

Photocopy the play and circulate the copies to the students if you have a photocopying machine. If you don't have a photocopying machine give your book to the selected students. One will take the part of the mother and the other will be the nurse. Ask them to read the play to the class. Choose other students take turns reading the play aloud if you have time.

7. Ask the students:

- Can a baby who is four months old eat by himself?
(No, he must be fed by someone.)

- Can a baby who is four months old chew hard or solid foods?

Why not?

(No, he has no teeth yet.)

- What kinds of foods can we give to children of four months of age?

(We can give the following foods to four-month-old children: mashed ripe pawpaw, mashed ripe banana, mashed kumala with coconut milk, mashed fish, mashed pumpkin.)

8. Show the class the pictures of a six-month-old and a one-month-old baby on page 52.

Compare the two babies.

- Look at the difference in size.

- Look at the difference in movement.

9. Tell the children:

- In just a few months the difference between the two babies is very great.

- The older baby is much stronger, and much bigger.

- He is growing very fast, and now he must start to eat more food.

- Each day his mother gives him mother's milk and some very soft, mashed foods that are easy for him to eat.

- She gives him foods from the three food groups, body-building (growth) foods, protective (health) foods, energy (power) foods because his body needs good nutritious foods to grow big and strong.

Introducing soft foods to four month old babies

- 9 Mother: Hello, Sister, I've brought my baby for you to see today.
- Nurse: Oh very good. Now, let me look at him... mm... He looks very healthy. How old is he ?
- Mother: He is four months old now, and he is gaining all the time.
- Nurse: Well, now that he is four months old, he has reached the age where his body needs to have more than just breast milk. So now you will have to start giving him some other foods.
- Mother: Oh! But he hasn't any teeth yet. He is too young for solid food; he may choke or be sick. In our village, it is our custom not to give babies solid food until they have teeth.
- Nurse: Yes, I know, many villages have customs like that because they think that the baby can't eat anything before he has teeth. But this is wrong. All babies have got to learn how to eat whether they have teeth or not. You must start teaching your baby to eat very early by giving him food mashed up so that it is very soft and has no lumps that the baby can choke on.
- Mother: But what if the baby spits out all the food?
- Nurse: Many babies spit out the food when they first taste it because it feels different in their mouths, and they don't like it. That's why you must start by giving baby just a tiny bit of food. Don't worry if he spits it out, just keep trying slowly. Slowly the baby will get used to the feel of food in his mouth and will start to eat it.
- Mother: What sort of food shall I give him first?
- Nurse: Well, some good first foods are ripe banana or sweet potato. You need to mash these foods with a fork and add some boiled water or breast milk to make them really soft so that baby can eat them easily.
- Mother: Well ... I will try to give him some food as you suggested, but my family will think that I'm very silly if I do this. I hope he doesn't get sick.
- Nurse: Sometimes when a mother starts to feed a baby on solid food, the baby gets a little bit of diarrhoea. If this happens you do not have to worry. It is only because the baby's stomach isn't used to food. If you feed him on the foods that his stomach will soon get used to, it will be all right.

Mother: How long should I feed him on these foods before he can eat lots of other foods?

Nurse: Well to start with, you should feed him just a little bit of food each day. Over the next two months very slowly increase the amount of food and the number of times you are feeding him in a day. By the time your baby is six months old, he should be eating five times a day and then you can add other foods such as mashed green leaves and pumpkin and a little fish or meat or mashed beans.

Mother: How long should I go on breast feeding my baby? Should I stop when he is eating well?

Nurse: Oh no! You must breast feed your baby for as long as possible, up to two years. But once you start to give solid foods, always give him his solid food before breast feeding. That way, he'll have a good appetite at meal time.

Mother: Thank you very much, Sister. I will try to do all you say, and I will bring him back to see you next month.

Nurse: Goodbye.

student activities:

1. Divide the class into small groups.

Pin up the "Givim titi" poster or trace the picture of the mother feeding her baby on page 49 and display it where all the children can see.

Write the following questions on the board or photocopy the questions and distribute a set to each group.

Questions for Givim titi poster and picture on page 45

1. What is the best food for babies?

2. What should a baby be eating at four to six months of age?

3. Why must a six-month-old baby eat very soft mashed foods?

4. Should the baby continue to drink mother's milk?

5. Which food groups are in mother's milk?

6. Can a four-months-old baby feed himself?

Say to the class:

- Read each question (on the board or hand out), and talk about the answers with your group.

- Have one person write down your answers so we can talk about them together.

(Allow about 15 minutes for the small group discussion.)

Bring the children together and discuss the answers to the questions.

1. The best food for babies is breast milk.
2. At four to six months of age a baby should be eating, soft nutritious foods like, ripe pawpaw, ripe banana, kumala, fish, pumpkin, eggs, etc.
3. A four to six-month-old baby should eat very soft mushy foods because he has no teeth.
4. Yes, the baby should continue to drink mother's milk.
5. Mother's milk has all the food groups in it: energy or power, body-building or growth, health or protective.
6. No! a four-month-old baby cannot feed himself.

Photocopy the following exercise and give a copy to each student or copy it on the board for the students to do in their exercise books.

Fill in the blanks

Fill the blanks using words from the list below.

1. _____ is the best food for babies.
2. A baby needs more foods when he is _____ old.
3. Mother's milk is very _____.
4. A baby should continue to drink mother's milk until he is at least _____ old.
5. A baby needs to eat _____ foods because he has no teeth.
6. Some good health foods a baby can eat are _____ and _____.

WORDS

good for baby
ripe pawpaw
pumpkin
soft, mushy

Breast milk
two years
four to six months

3. Here is a letter from a baby to his mother and father.

- Copy this on a big piece of paper and read it to the class
Pick out one or two students to read it to the class.

Dear Mama and Papa,

I know that you love me and that you want me to live a healthy life. I got all my nutritious food from you, Mama, when I was still inside you.

After I came into this world all I needed was your delicious milk, Mama, until I was four months old.

After that you and Papa fed me with good fresh local foods and Mama continued to breast feed me.

Well, Mama, I do hope you will continue to breast feed me for as long as you can.

When I am older I will need more and more food so I can grow up big and strong.

Thank you Papa and Mama for having me, giving me good food, and giving me much love and care.

Love,

Your baby!

Ask the children to pretend they are younger and write similar letters to their mothers and fathers. Sing the song about growing up called "If the line is going up".

If the life is going up
(Tune: If You're Happy and You Know It)

1. If the line is going up
I am growing. (repeat)
If the line is going up
I am growing strong and tough.
If the line is going up
I am growing.
2. If the line is going up
I am growing. (repeat)
If the line does not go up
I am not eating enough.
If the line is going up
I am growing.
3. If the line is going up
I am growing. (repeat)
If the line is going down
There's some sickness hanging around -
I am not strong and I'm not fat -
And I'm not growing.

(from Nutrition Song Book Volume 2)

LESSONS 17, 18, 19, 20, 21 and 22;

FOODS FOR ONE AND TWO-YEAR OLD CHILDREN

Objective

To learn what foods young children need, especially one to two year olds.

Time needed 30 minutes x 6

Preparation needed

- Trace and colour the growth chart pieces for the "student activities" section.

Materials needed

- Big papers for posters for Section 4
- Colour pencils to colour growth chart.

Teacher's notes

In the last lesson the children learned that babies grow very rapidly and the best food for them is breast milk. When the babies reach four to six months of age, breast milk alone is not enough to meet their needs. Therefore, it is important that the mother should start giving soft, mashed foods to her baby when he is four to six months old.

In this lesson the children will learn more about the foods young children need. In Year four the students have learned about the foods school children need and also how important breakfast is to school children.

Method

1. Show the children the breast feeding poster on page 62 (picture No. 1).

Ask the children

- What is the best food for babies? (breast milk)
- To which food groups does mothers milk belong?
(all the food groups)
- When a baby is four to six months old what other foods does he need ?
(He needs soft mashed foods because breast milk alone is not enough.)

- How long can a mother continue to give her baby mother's milk?

(for at least two years)

These questions are for oral discussions as a recapitulation of the previous lessons.

2. a) Tell the children:

- Babies grow very, very fast. They need lots of energy or power foods, protective or health foods and body-building or growth foods to keep them strong and healthy.

- Today we are going to study more about the foods young children need to grow big and strong.

b) Show the children the picture on page 63 (Picture No. 2)

Tell the children:

- This is a picture of a baby named Peter when he was six months old. He is sitting with his mother.

- His mother is feeding him soft mashed food. He cannot feed himself as he is too small.

c) Tell the children:

- A young child like Peter often spits out his food when he starts eating it for the first time.

- As a child grows he must learn how to eat foods.

- Eating food is very different from drinking mother's milk. Food tastes and feels very different from mother's milk. The spoon a mother uses to feed a small child feels very new and strange to him.

d) Show picture No. 2 again and tell the children:

- Peter is eating a good nutritious meal. Along with the mother's milk he drinks every day, he is getting plenty of food to grow strong and healthy.

- By the time the baby is one year old he should be able to eat five good nutritious meals a day. He also should continue to drink mother's milk. He can drink mother's milk along with other good nutritious food until he is about two years old.

3.

1. Show the children picture No. 3 (page 64).

Tell the children:

- Now Peter is about one year old. He has grown much bigger and is eating different foods. He is eating by himself.

2. Ask the children:

- What is Peter eating now?

- How is it different from when he was six months old?
(It is solid, not mashed)

- Why does Peter eat food that is not mashed now?
(he has some teeth)
- How many meals a day does Peter eat?
(five meals)
- Do you think Peter still drinks mother's milk?
(Yes he can drink mother's milk until he is two years or older)

3. Tell the children :

- Peter is eating five good nutritious meals every day, plus mother's milk. He eats the same foods that his mother and father do.
- Peter has his own dish, cup and spoon. Now he can eat by himself.
- He is eating energy or power foods, body-building or growth foods and protective or health foods.
- He needs foods from the three food groups every day.

4. Ask the children draw the following pictures in their exercise books or divide the class into four groups and ask each group to draw a poster of:

- Foods for a six-month-old child
- Feeding a six-month-old child
- Foods for a one-year-old child
- A one-year-old child feeding himself.

5. Write on the blackboard:

Give a six-month-old child mother's milk and mashed energy or power, body-building or growth and protective or health foods every day.

Tell the children:

- Write this phrase on your picture or poster if you drew one about foods for a six-month-old child.

6. Write on the black board:

"Give a one to two-year-old child mother's milk, and energy or power, body-building or growth and protective or health foods just as his mother and father eat every day.

Tell the children:

- Write this phrase on your picture if you drew one about food for a one-year-old child.
- Now let's say both sentences together, (repeat sentences together).

7. Tell the children:

- Today we have learned about special foods for small children. We found out that young children need different foods as they grow older.
- We found out that young children need mother's milk and foods from the three food groups.
- We learned that children who are six-month-old need soft mashed food, while older children of one year or more can eat the same foods as their mothers and fathers because they have teeth to chew food.

Method:

1) Show the children picture No. 4 on page 65 of Peter grown into a big boy. (He is three years old.)

Tell the children:

Peter is growing well.

He was given mother's milk until he was two years old. When he was about six months old, he started to eat very soft mashed foods from the three food groups. When he was one year old, he had some teeth and began to eat the same food that his mother and father do.

2) Show the children picture No. 5 on page 66 (Peter four years old.)

Ask the children:

- Do you remember who this is?
- Can someone describe Peter to me?

3) Tell the children:

- Peter eats good nutritious meals every day. He also eats some nutritious snacks between meals. Peter's stomach is still very small although he is four years old. He needs to eat small meals and good nutritious snacks throughout the day to get all the energy he needs.

In Year 4 we learned about different nutritious snacks that school children can eat.

Write on the blackboard:

Small children need nutritious snacks during the day to give them energy and to keep them healthy.

Ask the students to copy the sentence into their exercise book.

Ask the children to draw pictures of nutritious snacks under the sentence, for example, ripe bananas, oranges, peanuts, pawpaws, corn, mangoes, eggs, pineapples, etc...

4. Ask the children:
(Discuss the answer orally in class)

How can children grow bigger and stronger all the time?

Tell the children:

- If children are to grow bigger and stronger all the time, they must eat plenty of good nutritious food.

- We have learned about the special food needs of mothers, of babies and young children and about our own food needs.

- We have found out that: Everyone needs plenty of good nutritious food to grow strong and healthy.

Student activities

- 1) Get the children to measure their height and record it as in year 2.

a) Trace the growth chart pieces from page .. to ..., put them together and colour.

b) Put the growth chart on the wall in a permanent place where it can be kept for the rest of the school year. Have the students line up and mark the height and name of each student on the chart with a coloured pencil.

c) Repeat step b every two months for the rest of the school year. Each time the students are measured, use a different coloured pencil or crayon so that they can see the marks getting higher. Talk to the children about how they are growing. Help them to understand that they will grow better if they eat healthy food, especially fresh food.

c) How to measure children correctly

- When they are being measured, students should be bare-footed. They should stand very straight, with their backs, heads and heels against the chart on the wall. Put something straight such as a ruler, on the top of their heads, and use it as a guide when marking the chart. The ruler must be held horizontal.

Lessons 23, 24 and 25, FOODS FOR PREGNANT AND BREAST-FEEDING MOTHERS.

Objective

To learn about foods mothers need, especially pregnant and lactating mothers.

Time allowed 30 minutes x 3

Preparation needed

- Stencil or photocopy section II if you have access to either type of machines at your school.
- Get students to collect sixteen markers - stones, shells or seeds - for the nutrition bingo game.

Materials needed

- Big paper for poster
- Colour pencils (optional)

Teacher's note

When a woman is pregnant or lactating (breast feeding) her food needs are very important and should be given a high priority in a home.

Pregnancy is an important time in a woman's life. This is when a baby grows inside her body. To grow properly this unborn baby needs a mother who is eating the right type and amount of food.

A pregnant woman should eat lots of leafy vegetables such as island cabbage and watercress, fruits, fish, eggs and meat.

She also needs food from the three food groups.

Look at the picture of the food which a pregnant and lactating mother need on page 71.

Method

- 1) Tell the children

In our previous lessons we learned about different food needs for different members of the family. In this lesson we will study food needs for pregnant and breast-feeding mothers.

- A mother must eat extra food during pregnancy and breast feeding because she has to eat enough for herself and the baby.

- The mother must select her foods carefully to make sure that she is eating healthy foods, so that her baby grows properly and is healthy.

She must eat foods from the three food groups to keep herself and the baby in good health.

2) Show the pictures of the three food groups (pages 73, 75 and 77) to the students and discuss their importance in the diet of pregnant and breast-feeding mothers.

a) Body-building or growth foods (picture)

These are the foods that are needed to build the baby and make the baby grow up properly and strong. The mother needs plenty of food, to build up her body, to give birth to the baby, to breast feed it and to look after it.

A pregnant woman needs to eat body-building foods such as fish, shellfish, meat, eggs, chicken, peanuts and other body-building foods to help the baby grow inside her.

b) Energy or power foods (picture)

These are the foods needed to provide warmth, and to keep us working without getting too tired too quickly.

A pregnant and breast-feeding woman needs to eat energy or power foods such as taro, sweet potato, breadfruit, cooking banana, yam, rice, butter and oil to make sure she gets enough to stay fit and healthy during pregnancy and to help the baby grow and during breast feeding when the baby is born.

c) Protective or health foods (picture)

These are the foods that are needed by the body to allow all the different parts to work together and protect us from germs.

These foods are needed because they supply the body and the mother with important vitamins and minerals to keep their bodies healthy.

Many pregnant women can have weak blood if they do not eat enough of these foods, and this can cause problems for both the mother and baby.

Pregnant and breast-feeding women need to eat lots of dark green leafy vegetables plus other fresh fruits and vegetables each day.

- 3) Show the children the picture of a mother breast feeding her baby

- Here is a mother who is breast-feeding her baby.

To make enough milk to feed her baby the mother needs to eat extra food. She needs to continue eating the same kinds of foods which she was eating when she was pregnant. This means she must eat extra amounts of such foods as meat, fish, fruits, vegetables and root crops.

4) Show the students the pictures of drinks.

- The breast milk the mother gives to her baby has a lot of liquid; therefore, it is important that the mother should drink extra drinks. A breast-feeding mother should drink about ten cups of liquid every day. The best drinks for a breast feeding mother are water, milk, green coconut and fresh fruit juices.

5) Read the following story to the class or hand out stencilled copies or photocopies of the story and have the students read silently.

Rita and Her Pregnancy

Frank and Rita lived in a big town. Frank worked as a shopkeeper. Rita took care of her little son John. She tried to make a little garden in her back yard. The garden did not grow well. There was not much rain in the big town of Port Vila. Rita and Frank ate lots of kumala and rice.

One day Rita didn't feel well. She decided to go to the clinic. The clinic sister examined Rita. She took a drop of blood from Rita's finger and tested it. Quietly the sister said, "Rita, you are not eating the right kinds of food to make your baby grow strong inside you. You need plenty of green leaves and some fish or meat every day along with your kumala and rice. When all these foods are eaten together, they can make the baby grow strong and healthy. You need as much food as a working man. You should have three meals a day and some food between meals while you are pregnant and later while you are breast feeding".

Rita looked very sad. She had not told her husband that she was pregnant. Now Sister said that she might have a weak baby. She walked home very slowly and thought about her problem. She wanted to eat pumpkin tips but the market was very far away. Last week she had eaten some tinned fish. Frank did not like the smell of the tinned fish. He was cross at her for bringing it into the house.

When she got home, she told Frank what had happened at the clinic. He was very happy that they would have another baby. He was not happy when he heard the baby might be small and weak. Rita must have green leaves and some fish or meat every day, he said to himself.

Early the next morning Frank went to the market and bought some pumpkin tips. On the way home he bought two tins of fish at the trade store. Rita liked the greens and fish. Every day she had some greens and fish or meat with her kumala and rice.

When Rita went to the clinic the next month the sister smiled and said excitedly, "Rita, you have been a good mother. Your blood is stronger now. Your baby will be strong and healthy too." Then Sister looked at John. He looked much happier too. "Are you giving John some greens and fish or meat too, Rita?" Sister asked. Rita giggled "Yes, Sister, he eats foods just like me. He will be a strong brother for my new baby."

6) Ask the students:

- Why was Rita's blood weak?
(She was not eating the right kind of foods, especially the dark green leaves and meat or fish which help make blood strong.)
- Why should Rita have more food than usual?
(She is eating food for herself and for the baby growing inside her.)
- What kinds of food did the nurse tell Rita to eat every day?
(Body-building or growth and protective or health foods such as meat or fish and green leaves.)
- What is the work of protective or health foods?
(Protective or health food keep the baby healthy by keeping the body free from sickness).
- What body-building or growth foods did Rita start eating every day?
(fish and meat)

7) Ask the students:

- What RULE can you make up about food for pregnant and breast-feeding mothers?
(Allow a few children to give their ideas of a rule.)

8) Tell the students this rule, or write it on the blackboard for students to copy into their exercise books.

A mother must eat extra food from the three food groups during pregnancy and breast feeding because she has to eat enough for herself and the baby.

9) Divide the students into three or four groups and help them design a poster showing what foods are necessary for pregnant and breast-feeding mothers. The rule about food for pregnant and breast-feeding mothers could be written in big letters in the centre of the poster. Children could draw foods necessary for pregnant and breast-feeding mothers around the words. The pictures could be coloured if colour pencils are available.

If your school doesn't provide papers for such a project the students could carry out this activity in their exercise books.

10) Sing the song: "Let's eat three meals everyday."

11) Write the following activity on the blackboard or hand out stencilled copies or photocopies to the students:

Put words from the box in the empty places to make the sentences right.

1) A mother must eat _____ during pregnancy and breast-feeding.

2) The pregnant and breast-feeding mother must eat foods from the _____ to keep herself and the baby healthy.

3) If a pregnant mother does not eat enough vegetables and fruit she can have _____.

4) The breast milk the mother gives to her baby has a lot of _____.

5) One of the best drinks for a breast-feeding mother is _____.

liquid

green coconut

extra food

weak blood

three food groups.

10) Play the Nutrition Bingo game.

EVALUATION

Teacher's note:

1. The aim of this evaluation is to see whether the students have understood the content of the lessons.

You can carry out the evaluation in the following ways:

- a. If you have access to a photo-copying machine and paper you can photocopy the tests for each student. If you have access to a stencil machine you can prepare your own stencil and run off copies for your students.

Or

- b. You can write the test on the blackboard and ask the students to write only the answers to each question in their exercise books or on pieces of paper for you to collect and mark at the end of the test.

For example :

1. - a) Yes
- b) Yes
- c) No etc..

Or

- c. You can write the test on a big piece of blank paper and pin it up on the board or wall and ask students to write the answers to each question in their exercise books or pieces of paper for you to collect and mark at the end of the test.

For example :

1. - a) Yes
- b) Yes
- c) No etc..

Or

- d. You can read the questions to the students. This means that you have to repeat each question three or four times. The students again will only need to write the answers as in examples given in points b and c above.

2. The length of time needed to spend on each test is stated, however you can adjust the time to suit your need.
3. The total mark for each question and the whole test is also stated and here again you can adjust the marks to suit your school's particular marking system.
4. The answers for the nutrition end of term test are on page 89.

END OF TERM 2 NUTRITION

TEST

QUESTION 1

Fill in the blank.

Put in the correct words in the blanks; using words from the list below.

1. is the best food for babies.
(2 marks)
2. A baby should continue to drink mother's milk until he is at
least old.
(2 marks)
3. A baby needs to eat foods because he has
no teeth.
(2 marks)
4. A small child must eat times a day.
(2 marks)
5. If a pregnant mother does not eat enough vegetables and fruit
she can have .
(2 marks)
6. One of the best drinks for a breast feeding mother is
 .
(2 marks)

weak blood
one year
soft, mushy
Green coconut
lemonade
five
two years
Breast milk

QUESTION 2

Peter is dreaming about things that make him healthy.
Find them in the picture and circle them. (8 marks)

/ 20

END OF TEST

Answers of end of term 2 Nutrition

Test

QUESTION 1

- 1) Breast milk
- 2) two years
- 3) soft, mushy
- 4) five
- 5) weak blood
- 6) green coconut

QUESTION 2

Lessons 26, 27 and 28;

GERMS - CLEAN FOOD, CLEAN WATER.

Time allowed three lessons x 30 min.

Objectives

1. To revise what the children already know about flies carrying germs that can make them sick.
2. To learn about germs in water.
3. To learn how to make water safe to drink by boiling it.

Materials

1. Ten teaspoons of sugar and salt, a teaspoon.
2. Two glasses of clean water.
3. A glass of water from a tank, a glass of water from a well and a glass of water from a creek, river or ditch or drain. (Label the glasses clearly.)
4. Kettle with lid and a fire or stove.

Revision

Methods

Remind the students how they pretended to be flies in Lesson 12 in Year 2. They put their feet in mud and walked all over cardboard pictures of food just like flies walk all over real food leaving germs on the food.

Ask the children:

1. "How do we get sick?"
(Answer: Sickness germs that are very small get into our bodies.)
2. "How do sickness germs get into our bodies?"
(Answer: through our mouths, on food or in water)
3. "Where do we find sickness germs?"
(Answer: in things that are not clean such as dirt or in our wastes. Our hands often have germs on them too.)
4. "Can germs get into our food and drinks?"
(Answer: yes - if flies sit on our food or drinks, or if dirt or waste touch our food or drinks.)
5. "How can we stop germs from getting onto our foods?"
(Answer: by keeping our food clean - keeping our food covered when we are not eating it and washing our hands before we touch or eat food.)

6. "What should we do with fruits and vegetables before eating them to protect ourselves from germs?"
(Answer: wash them in clean water before eating or cooking them.)

Activity 1

Method

1. Show the children a glass of water.

Add about a 1/4 teaspoon of sugar and stir carefully.

Ask the children:

- Can you see sugar in this glass of water?
- Where has the sugar gone?
- If we look at the water now, can we tell that it has sugar in it?
- What if we add salt and stir the water ... can we see the salt in the water?
- Can we tell what is in the water just by looking at it?

2. Tell the children :

- Sickness germs that can make us sick with colds, diarrhoea and other diseases are much smaller than the grains of salt or sugar. When we look at the water we cannot see if it has dangerous germs in it or not.

- Looking at water is not a good test to see if it is safe to drink because we cannot see the sickness germs and bacteria in water just by looking at it. This is especially true of river water.

3. Ask the children:

- What can cause river water to become full of sickness germs and harmful bacteria?

(Sickness germs can come from human or animal faeces which go into the river, from rubbish dumped in or near the river or ditch or from the bodies of sick people who bathe in the river).

- Is it safe to drink water that has sickness germs or harmful bacteria in it? Why not?

4. Collect some water in glasses or other containers from different sources, e.g. river, tank, creek, tap.

Leave the water for several days. Then observe the containers.

Ask the children:

- What does the water look like now?
- How has it changed in a few days?
- Can we see anything growing in the water?

5. Tell the children:

- The water is full of hidden life and perhaps many sickness germs and harmful bacteria. When we first looked at the water a few days ago, we could not see all this hidden life.

- Which container has the most hidden life? Where is this water from?

Activity 2

1. Show the picture of a child drinking water from a river near a toilet (page 93).

2. Ask the children to write a short story about what they see in the picture, especially about how germs travel. They can draw or write their stories.

3. Let some children show their pictures and describe what is happening or tell their stories to the class.

4. Place some or all of the stories and pictures on the wall.

5. Discuss how you could stop the germs from reaching the boy. (You could make a rule that people collected water from that higher up the river, above the toilet. Can you be sure other people higher up do not go to the toilet on or near the river?)

Activity 3

Boiling water to kill harmful bacteria

Ask the children:

- Is there a way to kill the sickness germs in the water? (yes, by boiling the water for ten minutes).

- What is the difference between heating water and boiling water?

(Boiling water bubbles strongly, and a lot of steam leaves the surface; heated water moves very gently and there is little or no steam.)

2. Tell the children:

Heating water but not boiling it does not kill harmful germs. Water must be boiled to kill the germs.

3. Prepare a demonstration for the children:

- Using a fire or stove, boil water in a kettle or pot with a lid.

- Remind the children that covering a kettle or pot helps the water to boil faster and saves fuel.

4. Ask the children:

Who can tell me what the water looks like as it gets hot and boils?

(Boil the water for about ten minutes.)

- Since we must boil water to make it safe before we drink it, must we always drink hot drinks?

(No, we can cool water and have cool drinks too.)

- How can we keep germs from getting into the water while we are cooling it?

(by keeping the water safely covered.)

Show the children the picture of water boiling in a kettle over an open fire and a bottle and bamboo for storing clean water.

Activity 4

1. Sing the "Boil your water song" to the tune of Frere Jacques.

Boil your water,
Boil your water
From the creek,
From the creek
Make it safe for children.
Make it safe for children
Kill the germs.
Kill the germs.

2* Ask the children:

- Why should you boil the water?

(Answer: To kill the germs and prevent sickness)

- Why is it important to have safe water?

(Answer: So that we don't get sick)

Lessons 29, 30 and 31; CLEAN FOOD PREPARATION

Objectives

- 1) To learn that foods, drinks, cooking and eating utensils and cooking areas must be kept clean at all times.
- 2) To learn that before touching food everyone must wash their hands, especially after going to the toilet.
- 3) To learn how to store food in cool, dry, clean places where rats and flies cannot get at it.

Materials needed

- Old mud-covered sandal or thong.
- Fly swatters such as local pandanus or coconut leaf fan.
- Fly cover, food net, plastic bags, clean cloths, clean fresh leaves.
- Some fresh foods.

Method

1. Explain to the children:

- All the things we cook with, knives, pots, cutting boards etc., and all the things we eat with, plates, cups, glasses, spoons etc., must be kept very clean so that the food we eat is clean too.

- We can keep all these things clean by washing them with clean water and soap.

- Table tops, cutting boards and cooking areas should also be washed after they are used so that they won't attract flies, insects or rats. If they are clean then the things that cause sickness will not have a place to live.

2. Ask the students if they can remember what the things that cause sickness are called.
(Answer: Germs)

Show the children the dirty sandal.

Ask the children:

- How did the shoe get dirty like this?
- Would you want this shoe to be sitting on your dish or on your food?
- Why not?
- What might happen to your food?

3. Tell the children:

- Flies walk everywhere, and their feet get covered with a lot of dirt and sickness germs.

- If flies walk on our dishes, in our food, or where we prepare our food, the dirt and sickness germs on their feet get on our food, just as the dirt from the sandal would.

- It is very important to keep flies out of the house and off our food and dishes.

4. Ask some children to use the different covers, such as leaves, cloths, plastic bags etc., to cover the fresh foods to keep out flies.

5. Show the children how to use the fan as a fly swatter (try to kill a fly in the classroom).

Activity 2

1. Show the picture on page 98 of flies on a bowl of food.

2. Ask each child to write a story about what he or she sees in the picture. Tell the children their stories should be about how germs travel. They can draw or write their stories.

3. Let some of the children show their pictures and describe what is happening or tell their stories to the class.

4. Place some or all of the stories and pictures on the wall.

5. Discuss with the class how you could stop the germs from the flies getting on the food by using a cover to protect the food.

Activity 3

1. Write on the blackboard:

**Wash your hands before you touch or eat food,
especially after you have used the toilet.**

2. Show the picture on page 99 of a child going to the toilet, flies around etc.

3. Ask the children:

Why is it important to wash our hands before we touch or eat food?

4. Tell the children to write in their books what you have written on the board.

5. Ask the children to listen very carefully as you read the story of Kai and his family.

- Show the children the picture of Kai and his family on page 101, and proceed to read the story.

- Tell the children:

Today I will read you a story about Kai.

Kai was a clever boy. He liked to go fishing. Kai would spend most of the afternoon after school looking for fish. Usually he caught at least one fish to take home.

Yesterday when Kai returned to his village he proudly showed his family the blue fish he had caught. His mother began to cook the blue fish for dinner. When it was ready, she called Kai from his play on the dirt field near his home. Kai came straight home and sat down to eat. The family used their fingers to eat the food. They never bothered to wash their hands before eating. The food was put on a plate. Flies sat on the plate and on some of the food while they were eating. They drank dirty water from the nearby well. Kai did not know that flies carry disease germs. He did not know that germs live in dirty water. When Kai ate his food he also ate germs.

Kai's baby sister had been sick for two days. She had pains in her stomach and had been passing a lot of watery diarrhoea. Kai's mother didn't wash her hands after she had changed Linessa's nappy. Linessa was very thin and weak. Kai became worried. He was frightened that Linessa would die. He asked his parents to take Linessa to the clinic. They decided to go to the clinic in the morning.

Kai was the first out of bed. He started to walk and found that he too was having stomach pains. He did not feel like eating. He began to have diarrhoea. He became frightened. The clinic was two miles away. The family carried Linessa, and Kai walked slowly behind. The pain in his stomach made him feel very weak.

Finally they arrived at the clinic. They told the nurse what happened to Linessa. She looked at Linessa. Then she looked at Kai and asked what had happened to him. Kai explained that he had only been sick since early this morning.

The nurse gave Linessa some medicine and boiled sugar and salt solution to drink. "You must give her, some boiled sugar and salt solution every 15 minutes," she said. They sat in the shade near the clinic. While they waited, the nurse told them that people get this sickness called diarrhoea or dysentery because they do not keep their hands and food clean.

Then she sat down near Kai and his family. "Now I will tell you how to keep from getting diarrhoea again," she said.

What do you think the nurse told Kai and his family?

6. Ask the children:

1. What did Kai do before he sat down to eat?
2. Who cooked Kai's food?
3. What work did Kai's mother do before she cooked the blue fish?
4. What kind of water did Kai and his family drink?
5. Why did Kai become sick with stomach pains?
6. What five rules could the nurse have given Kai's family to prevent them from getting diarrhoea?
7. Tell the children to trace their hands on a page in their books, to write down these five rules on each finger and to repeat them aloud together.

Handy Health Rules

- 1) Always wash hands.
- 2) Boil water.
- 3) Wash raw food.
- 4) Keep flies off food.
- 5) Wash your cooking and eating things.

(See illustration on page 104.)

Activity 4

Preparing food cleanly and cleaning up afterwards.

Materials

- Foods from the three food groups
- Knives, cutting board, pot, plates, (spoons if available)

Method

1. Divide the class into working groups to collect the food, wash it, cut it etc... cook it and clean up the cooking area and utensils and put away the pots, knives and plates afterwards.
2. Before the children begin, go over the five important rules for preparing and eating food in Activity 3. Everyone should wash his or her hands to start.
3. Enjoy your healthy, clean, safe meal with the children!

Activity 5

Read this story. Put words from the box in the empty places to finish the story.

Flies and _____ come to places where there are _____ of food, such as tables, dirty _____, dirty knives, forks and spoons. These _____ spread diseases. People who eat from _____ plates may get _____. Mothers who prepare _____ must always keep everything _____. Cooking _____ and pans must be _____ before being used. Plates, _____ and spoons must be washed after the food has been _____. Of course, clean _____ must always be used.

food, pots, cockroaches, sick,
eaten, water, insects, scraps,
clean, dirty, dishes, plates,
washed.

Lessons 32, 33 and 34; BUDGETING

Time allowed 30 minutes x 3

Objectives

1. To understand that "budgeting" means planning to spend money wisely.
2. To know that people should spend money first on good foods before they buy other things.

Method

1. Ask the children to listen carefully as you explain the following to them. Write underlined words on the board as you come to them:

In the old days people used pigs, pig tusks, mats, and beads to obtain many things they needed or wanted. Today most people use money to buy food, garden tools, radios and many other things from the store. In Vanuatu we call money "Vatu." Today people need to know how to spend money on the right kinds of foods to keep their families strong especially if they live in towns. Sometimes too much money is spent on rubbish foods or beer. People need to know how to spend their money on good foods before they buy other things. They must remember that food is the most important thing. It is the first thing to buy.

Learning how to use money properly can be very hard. Many people spend all their money as soon as they get it. People must think of all the things they need and buy those things first. Then, if they have some money left over, they can buy other things that they want. Thinking about how to use money like this and not spending it all at once is called making a budget.

People must be careful to use their money to buy foods in the store which have the most goodness in them. We know that rubbish foods like fizzy drinks and Bongos are expensive. If we buy too much of these things then we won't have enough money to buy good foods.

Another way to help make sure money is used properly is to find good foods that are cheap. It is often cheaper to buy a lot of food that will keep to buy small amounts every day. A big sack of rice is usually cheaper than buy many smaller packets. Store bought food safely where rats and cockroaches cannot get into it.

Activity 1

2. Draw the crossword and clues on the board.

Clues

1. What we use nowadays to buy things.
2. The most important thing to buy with money.
3. When things do not cost too much, we say they are
4. How much something costs.
5. When something costs a lot of money, we say it is
6. When we think how to use money wisely, we make a
7. The name for money in Vanuatu.

3. Ask the children to draw the crossword and write the clues in their books. Then ask them to complete the crossword.

Answer :

Activity 2

Food Price Survey

Teacher's note:

Some shops are cheaper than others. In town there are many shops to choose from. Some shops have a very wide choice of foods. For any one food there may be a number of possible choices, e.g. there may be several brands of tinned meat. Which one is the best nutritionally, and is not too expensive? This activity, a price survey, will help the children to begin to look at prices and compare them between shops. If you are in a rural area where there is only one shop, it will still help the children to learn how much the different foods cost and which are the best choices when they or their parents only have a limited amount of money.

Materials

A can of meat, a can of fish, a packet of rice.

Method

1. Explain to the children that they will be going to the shop to find out the prices of foods and to learn how to spend money wisely on food.

Draw the table on the board and ask the children to copy it carefully into their books.

FOOD	Brand	Shop 1 is		Shop 2 is		Shop 3 is	
		Price	Weight	Price	Weight	Price	Weight
		on	label	on	label	on	label
Milk Powder							
Tinned meat							
Tinned fish							
Rice							
Bread							
Cabin biscuits							
Peanuts							
Twisties							

3. You may need to ask another teacher to come with you to the shop (or shops) to help supervise the children.

4. You may wish to divide the class into groups so that some collect prices and weights on tinned meat only, tinned fish only, milk only, rice only etc....

5. Make sure that the children write down the price and weight for at least two different brands of tinned food.

Try to get different weights of rice and tinned milk and their prices.

6. Explain to the children how to read a label before you go to the shop. Use a few examples of tinned foods :

1) the name or brand, e.g. Ox and Palm, mackerel 777, etc.

2) the weight, eg. 125g, 75g, etc.

7. Do a few examples of filling in the form on the board.

8. Go to the shops and do the survey.

9. On return or at the next lesson, ask the children for the prices and weights of foods they have recorded and fill in the table on the blackboard.

10. Ask the children these questions:

1) If you have been to one or more shops, discover with the children which shop is the cheapest for each of the different foods? Which shop is the most expensive? Is one shop cheapest for everything? Which one is it?

2) Best buys

Which is the cheapest energy or power food?

The peanuts and Twisties may cost the same price. But which one is the best value? Peanuts, of course! Twisties are rubbish food.

Which is the cheapest body building food?

Did you collect the prices of any protective foods?

Tell the children:

Most protective foods are fresh foods, not tinned or packaged foods. It is very important to try to eat some fresh foods everyday so that you eat some protective foods to keep you healthy and protect you from sicknesses. It is also good to grow protective foods so that they are available every day and do not cost money. Even in the town it is possible to grow some island cabbage and fruit trees around the house. If there are no fresh protective foods in the garden, it is important to set aside some money in the budget to purchase fresh fruits and vegetables from the market.

QUESTION 1

Answer the questions below with the sentences in the box.

- to kill the germs and prevent sickness.
- on things that are not clean.
- wash them in clean water.
- to make sure there are no germs on our hands before we eat.

a) Where do we find sickness germs?

(2 marks)

b) What should we do with fruits and vegetables before eating?

(2 marks)

c) Why should we boil water?

(3 marks)

d) Why is it important to wash our hands before we eat our food?

(2 marks)

Question 2

Write your five "handy" health rules on each finger.

(10 marks)

Question 3

Write Yes or No in the boxes at the end of the following sentences:

a) Thinking and planning how to use money properly is called budgeting.

(1 marks)

b) A can of meat in every shop costs the same.

(1 marks)

/20

End of test

Answers to End of Term 3 Nutrition test

QUESTION 1

- a) on things that are not clean
(2 marks)
- b) wash them in clean water.
(2 marks)
- c) to kill the germs and prevent sickness
(2 marks)
- d) to make sure there are no germs on our hands before we eat.
(2 marks)

QUESTION 2

(10 marks)

Question 1

a) Yes

(1 mark)

b) No

(1 mark)

/ 20

End of test

MEANING OF WORDS USED IN YEAR 5 LESSONS

WORDS	MEANING
Adult	One who is grown up. Example: mother and father and grandfather and grandmother.
Bacteria	Small living things which we cannot see with our eyes. We have to use a special machine to be able to see them. Sometimes these living things can make us sick if we are not clean.
Bottle feeding	Feeding a small baby with milk bought from the store using a plastic or glass bottle.
Brand	A special mark or name of something which you can buy from a store. For example a brand of tinned meat is Ox and Palm etc...
Breast-feeding woman	A woman who feeds her baby with milk from the breast.
Breast milk	Milk from a woman's breasts.
Budgeting	Planning to spend money wisely.
Calories	Nutrient found in energy foods.
Delicious	Food which smells and taste really nice.
Diarrhoea	Sickness in which the waste passed from the body is soft and watery. This sick person must pass waste many times in a day. This often happens to children who do not eat well or who have sickness germs in their bodies.
Digestion	The body's way of breaking down food into very very small pieces or into nutrients so that the body can use them to keep the body working and healthy.
Digestive system	The parts inside the body such as the stomach and gut or intestines where there is break down or digestion of food into very tiny pieces or nutrients so that the body can use these nutrients to keep the body working and healthy.
Fly swatter	Something which is used to kill flies by hitting them. For example a pandanus or coconut leaf fan.

Germs (sickness)	Very tiny living things which we cannot see with our eyes. They live in dirt, in water, in human and animal waste. If they get into our bodies, they can make us sick.
Intestine	A Very long tube which is wound round in lots of loops so that it fits in the belly. This is where the food is broken down into very fine pieces and where nutrients are released from the food for the body to use.
Label	Mark on tinned meat or fish or packet of biscuit and so on, to tell us what brand it is, where it is made, and so on.
Lactating woman	A woman who breast feeds her baby.
Minerals	Nutrients found in health and protective foods, such as fruits and vegetables.
Nutrients	Things which are found in foods after the foods are broken down into very fine pieces. The three kinds of nutrients are protein, which are found in body building food, calories which are found in energy foods and vitamin and minerals which are found in protective foods.
Nutritious food	Very good food or food which has lots of good things or nutrients in it to keep the body healthy.
Pregnant woman	A woman who is going to have a baby.
Proteins	Nutrients found in such body-building foods as fish, eggs, meat etc....
Select	Another word for choose.
Stomach	Part of the body where food goes when it is swallowed. It is right below the ribs on the left side.
Substances	Very small uniform pieces of something.
Vatu	The money that is used in Vanuatu.
Vitamins	Nutrients found in protective foods.
Weight	A number which we can find on a can of fish or meat, which tells us how heavy the can is. Examples: 325g or 420g. We can also find the same on packets of biscuits, rice, sugar, and so on.

