



KaziBantu



Healthy Schools for Healthy Communities

GRADE 6

KAZIKIDZ TEACHING MATERIAL

AUTHOR TEAM OF THE *KAZIKIDZ* TEACHING MATERIAL

Project management

- Prof. Dr. Uwe Pühse, Principal Investigator, University of Basel, Switzerland
 - Prof. Dr. Cheryl Walter, Principal Investigator, Nelson Mandela University, Port Elizabeth, South Africa
 - Prof. Dr. Jürg Utzinger, Director of the Swiss Tropical and Public Health Institute, Basel, Switzerland
 - Prof. Dr. Markus Gerber, University of Basel, Switzerland
 - Dr. des. Ivan Müller, Project Coordinator, University of Basel, Switzerland
 - Stefanie Gall, PhD student, University of Basel, Switzerland
-

Physical Education - Swiss and South African experts and advisors

- Melanie Glover, University of Basel, Switzerland
 - Roman Aebischer, University of Basel, Switzerland
 - Danielle Smith, Nelson Mandela University, Port Elizabeth, South Africa
 - Siphesihle Nqweniso, Nelson Mandela University, Port Elizabeth, South Africa
 - Larissa Adams, Nelson Mandela University, Port Elizabeth, South Africa
 - Nandi Joubert, Nelson Mandela University, Port Elizabeth, South Africa
 - Drusilla Deysel, Eastern Cape Department of Sport, Recreation, Arts and Culture (DSRAC), South Africa
 - Heather Gibbon, primary school physical education teacher, Port Elizabeth, South Africa
 - Margie Botha, primary school teacher, Port Elizabeth, South Africa
 - Prof. Dr. Rosa du Randt, Nelson Mandela University, Port Elizabeth, South Africa
 - Prof. Dr. Darelle van Greunen, Nelson Mandela University, Port Elizabeth, South Africa
 - Dr. Christian Herrmann, University of Basel, Switzerland
 - Dr. Harald Seelig, University of Basel, Switzerland
 - Marina Wälti, University of Basel, Switzerland
-

Moving-to-Music - Swiss and South African experts and advisors

- Chantal Brügger, University of Basel, Switzerland
 - Lize van der Walt, University of Basel, Switzerland
 - Dr. Marelize Marx, Nelson Mandela University, Port Elizabeth, South Africa
 - Beatrice Goetz, dance expert and lecturer, University of Basel, Switzerland
 - Gareth Williams, music producer, Nelson Mandela University, Port Elizabeth, South Africa
 - Christine Joubert, music therapist, Nelson Mandela University, Port Elizabeth, South Africa
 - Nicki-Ann Rayepen, choreographer, Port Elizabeth, South Africa
-

Health, Hygiene and Nutrition - Swiss and South African experts and advisors

- Nicola Hausner, University of Basel, Switzerland
 - Tracey Marais, Nelson Mandela University, Port Elizabeth, South Africa
 - Dorelle Isaacs, Department of Education, Port Elizabeth, South Africa
 - Dr. Peter Steinmann, public health specialist, Swiss Tropical and Public Health Institute, Basel, Switzerland
 - Dr. Bruce Damons, Nelson Mandela University, Port Elizabeth, South Africa
 - Prof. Dr. Annelie Gresse, Nelson Mandela University, Port Elizabeth, South Africa
-

Illustrations and design

- James Scholtz, director of Rooftop, Port Elizabeth, South Africa
- Kathryn Smith, project manager, Rooftop, Port Elizabeth, South Africa
- Sarah Jane Collins, Rooftop, Port Elizabeth, South Africa

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Novartis Foundation, Basel, Switzerland: Dr. Ann Aerts, Head of the Novartis Foundation, in collaboration with Christina Wadhwani (Head Incubator Models in Public Health) and Zaahira Gani (Project Manager)

Address

Novartis Foundation
Novartis Campus
Forum 1-3.97
4002 Basel
Switzerland
Phone: +41 61 696 23 00
info@novartisfoundation.org

Media

For media inquiries, please contact Nikolaus Guntrum
Phone: +41 61 696 57 62
nikolaus.guntrum@novartis.com

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NELSON MANDELA
UNIVERSITY

 **University
of Basel**

Swiss TPH 
Swiss Tropical and Public Health Institute
Associated Institute of the University of Basel

DSBG 
UNIVERSITY OF BASEL
Department of Sport, Exercise and Health

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**The Novartis
Foundation**

LESSON PLANS FOR
Grade

6



***Health & Hygiene
and Nutrition***



***Physical
Education***



***Moving to
Music***



KaziKidz

Teaching Material for Schoolchildren

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INSTRUCTIONS FOR HEALTH, HYGIENE AND NUTRITION CONTENT PILLAR

The *KaziKidz* toolkit is a holistic educational and instructional tool for primary school teachers and arose from the project *KaziBantu*. *Kazi* means “active” and *Bantu* means “people” in Swahili, one of the national languages of South Africa. The lessons have been designed in conjunction with South Africa’s Curriculum and Assessment Policy Statement (CAPS). Ready-to-use assessments can be found at the end of each section which may be integrated into formal assessments of learner performance and can supplement the school academic curricula. The aim is to lead learners through content, games and activities, and conducted in a joyful manner that encourages and promotes a healthy lifestyle throughout childhood into adolescence. By using *KaziKidz* you will be contributing to the wellbeing and health of your learners.

While neglected tropical diseases (NTDs) do not feature prominently in the burden of disease statistics of South Africa, some NTDs are common in disadvantaged populations, especially in children growing up in poor neighborhoods. Chronic helminth infections (worms) not only cause morbidity, but also negatively affect the cognitive and physical development and school performance of children. By addressing these conditions through education about appropriate health and hygiene behaviors for your school child (3 x 40 minute lessons per grade for grades 1 to 7), both you and the school child are at a reduced risk for infectious communicable diseases.

Inadequate intake of nutritional foods may adversely affect the health and well-being of primary schoolchildren from disadvantaged areas. The limited dietary diversity is further influenced by the lack of nutritional options offered at the tuck shops and food vendors at the schools.



The general wellbeing of primary schoolchildren from poor neighbourhoods may also be affected by lack of nutritional value, since schoolchildren usually eat food served by tuck shops and vendors during school hours. The South African National School Nutrition Programme (NSNP) attempts to address energy, protein and micronutrient deficiencies and alleviate short-term hunger by providing food that supplies 30% of the daily energy requirements of a child. In order to complement this, the nutritional education lessons (3 x 40 minute lessons per grade for grades 1 to 7) should bring dietetics closer to the learners in a playful way. Furthermore, it aims to encourage sustainable healthy eating habits throughout their life. *Kazi* and lesson plans in green will guide you through the Health, hygiene and nutrition teaching materials.

Now, we wish you a lot of fun with the implementation of the *KaziKidz* teaching material and many great experiences with your schoolchildren.

OVERVIEW OF THE KAZIKIDZ HEALTH, HYGIENE AND NUTRITION CONTENT PILLAR AND ASSESSMENT STRUCTURE

GRADES

SCHOOL LEVELS



Foundation Phase

Health and hygiene lessons: 3
Nutrition lessons: 3
Assessments incl. solutions: 2

Health and hygiene lessons: 3
Nutrition lessons: 3
Assessments incl. solutions: 2

Health and hygiene lessons: 3
Nutrition lessons: 3
Assessments incl. solutions: 2



Intermediate Phase

Health and hygiene lessons: 3
Nutrition lessons: 3
Assessments incl. solutions: 2

Health and hygiene lessons: 3
Nutrition lessons: 3
Assessments incl. solutions: 2

Health and hygiene lessons: 3
Nutrition lessons: 3
Assessments incl. solutions: 2



Senior Phase

Health and hygiene lessons: 3
Nutrition lessons: 3
Assessments incl. solutions: 2

HEALTH, HYGIENE AND NUTRITION



KaziKidz

Teaching Material for Schoolchildren





Lesson tracker

Health, Hygiene and Nutrition - Grade 6



This overview table should facilitate the tracking of the lessons and assessments.

Component	Term	Lesson Number	Lesson Content	Date
Health and Hygiene		Lesson 1	Physical activity	
		Lesson 2	Basic first aid	
		Lesson 3	Food hygiene: Clean water and food	
		Assessment: Health and Hygiene		
Nutrition		Lesson 4	Food hygiene: Safe and harmful ingredients	
		Lesson 5	Reading labels	
		Lesson 6	Safe food preparation and storage	
		Assessment: Nutrition		



Physical activity

Health and hygiene: Intermediate phase

Materials

- Worksheet 6.1.1 - Physical Activity
- Guidance 'Activity Parkour'

Aim

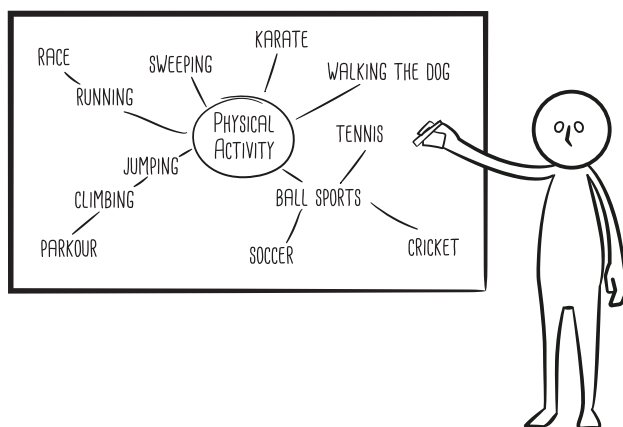
- To increase knowledge about physical activity.
- To know the importance of physical activity and its benefits.

Introduction

Introduction
Time: ~ 5 min

Welcome the learners and introduce the daily topic.

Make a mind-map with the help of the learners. In the middle of the mind map, write 'physical activity' and ask the learners what they think of when they hear the word 'physical activity'. Write everything mentioned on the blackboard.



Worksheet physical activity

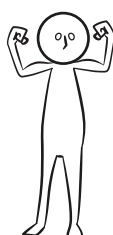
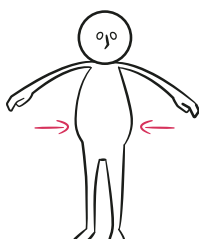
Main part
Time: ~ 10 min

How to implement

Give the worksheet 6.1.1 'Physical Activity' to the learners and go through the different questions.

Health benefits (answers to question number 3 on the worksheet)

- Helps to maintain a healthy body.
- Reduces the risk of disease.
- Controls your weight.
- Strengthens your bones and muscles.
- Improves your mood.
- Improves sleep.



Let's do physical activity

Main part
Time: ~ 20 min

How to conduct

Have a closer look at sports and exercise. Tell the learners that there are different types of abilities. Go outside and do some exercise with the learners. Learn about the different abilities. Go outside with the learners and do the 'Activity Parkour'.

Activity parkour

Introduce the 'Activity Parkour' and tell the learners the different abilities needed for each station of the parkour.

1. Balance

Draw lines on the ground or take a rope (~5m) and let the learners try to walk/balance forwards and backwards. Instruct the learners to perform the next round with their eyes closed. Finally, try performing the activity without using their arms to keep the balance.

2. Flexibility

Let the learners try to touch their feet with straight legs.

3. Endurance

Instruct the learners run around the school building 3 times as fast as they can.

4. Strength

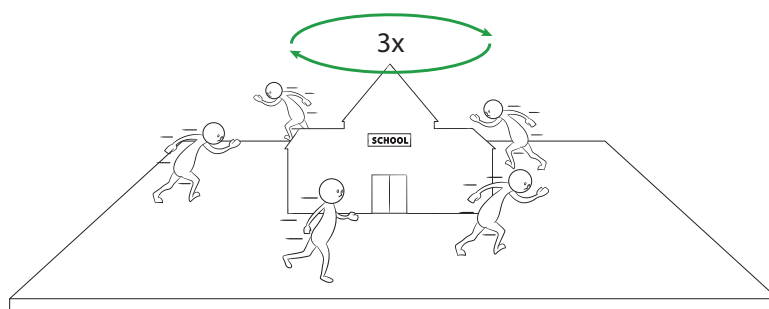
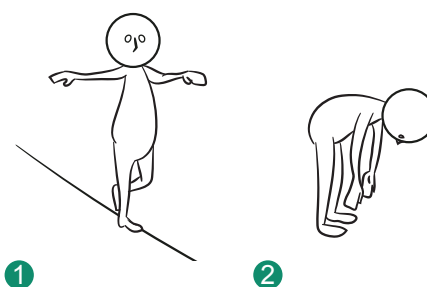
Tell the learners to do as many push-ups as possible (make a competition out of it). Tell them to do a squat. The learner who can hold the position the longest is the winner.

5. Coordination

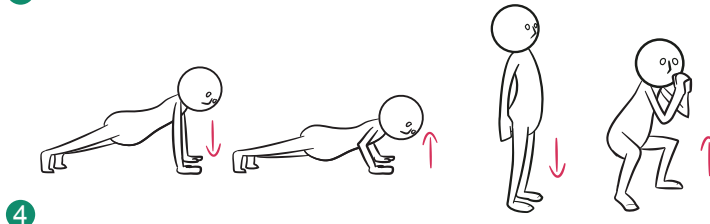
Draw a line on the ground or use a rope. Let the learners jump back and forth with their feet together. To make it harder, tell them to do it on one leg.

6. Speed

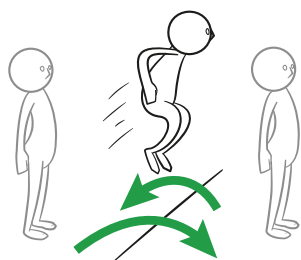
Learners race in a competition. Identify the boy and girl who are the fastest. Make groups of 10 and the winner (1 boy, 1 girl) gets into the final run.



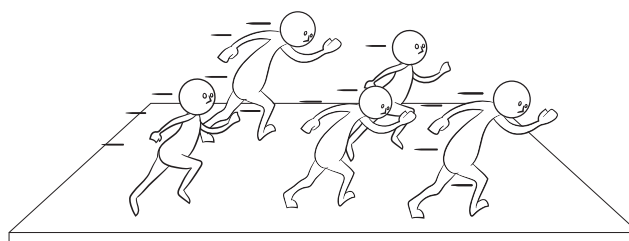
3



4



5



6

Summary

Wrap up
Time: ~ 5 min

Repeat what you have learnt today.



Physical activity

Worksheet 6.1.1

First and last name: _____

Date: _____

Class: _____

‘Physical activity’ definition:

Physical activity is any bodily movement produced by the skeletal muscles that use energy. This includes sports, exercise, and any other activities such as playing, walking, household chores, gardening, and dancing. Any activity, be it for work, to walk or cycle to and from places, or as part of leisure time, has a health benefit.

(World Health Organization, 2017)

1. Write down as many physical activities as you know.

2. Do you do physical activity? Write down your physical activities.

3. Why do you think that physical activity is good for your health? Discuss this with your partner.



Basic first aid

Health and hygiene: Intermediate phase

Materials

- First aid kit from school if available
- Handout 6.2.1 - Basic First Aid
- Worksheet 6.2.2 - Basic First Aid

Aim

- To increase knowledge about basic first aid.
- To learn some methods of basic first aid.

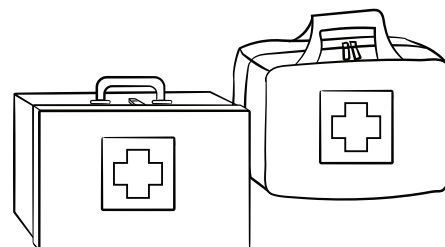
Introduction

Introduction
Time: ~ 10 min

Welcome the learners and introduce the daily topic.

Ask the learners what they know about basic first aid. Write the points that the learners talk about on the blackboard.

If there is a first aid kit in the school, the teacher should take it to the classroom and show the learners everything that is inside the kit. Put each part on a table and explain all the different things and how they are used.



Role play

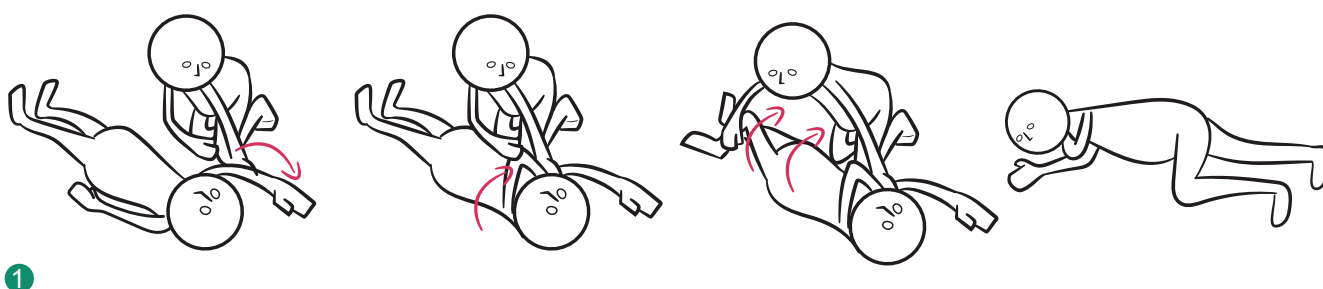
Main part
Time: ~ 20 min

How to perform

Instruct the learners to make 7 groups. The teacher must give every group a hand out about one of the first aid topics. Explain that the learners need to read the sheet and ask questions if something is not clear. In the groups, the learners must role play the situation that is given. One learner is a 'patient' and the others will help him/her.

1. Recovery position
2. Pressure bandage
3. Choking
4. Nose bleed
5. Strain
6. Sunstroke
7. Call the emergency

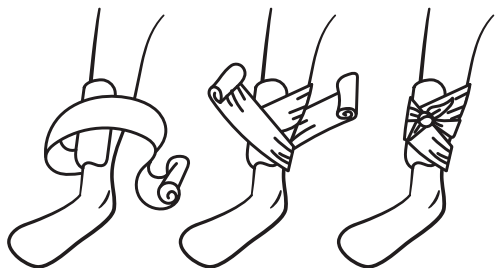
Allow time for the groups to practice their situations. Each group will present ITS situation as a role play in front of the class.



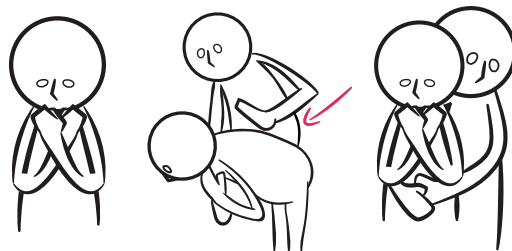
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Role play

Continued



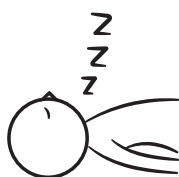
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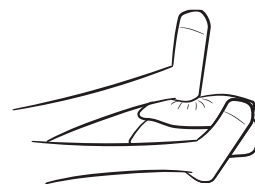
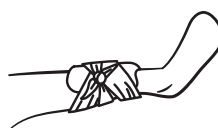
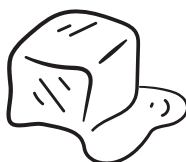
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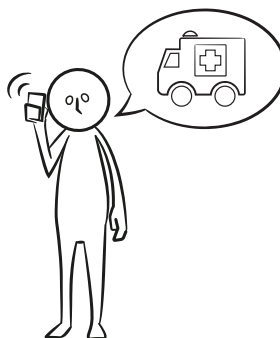
4



5



6



7

Basic first aid crossword

Main part
Time: ~ 5 min

If you have time at the end of the lesson, give each learner a crossword and let him/her search for the words.

Summary

Wrap up
Time: ~ 5 min

Repeat what you have learnt today!

Homework

Learners must be instructed to go home and ask their parents for the emergency numbers and write them down. If the learners' parents don't know, the learners must ask for the phone book to search for the numbers.

Notes: Control and add the missing emergency numbers if necessary. Every learner has his/her own list with the most important emergency numbers.

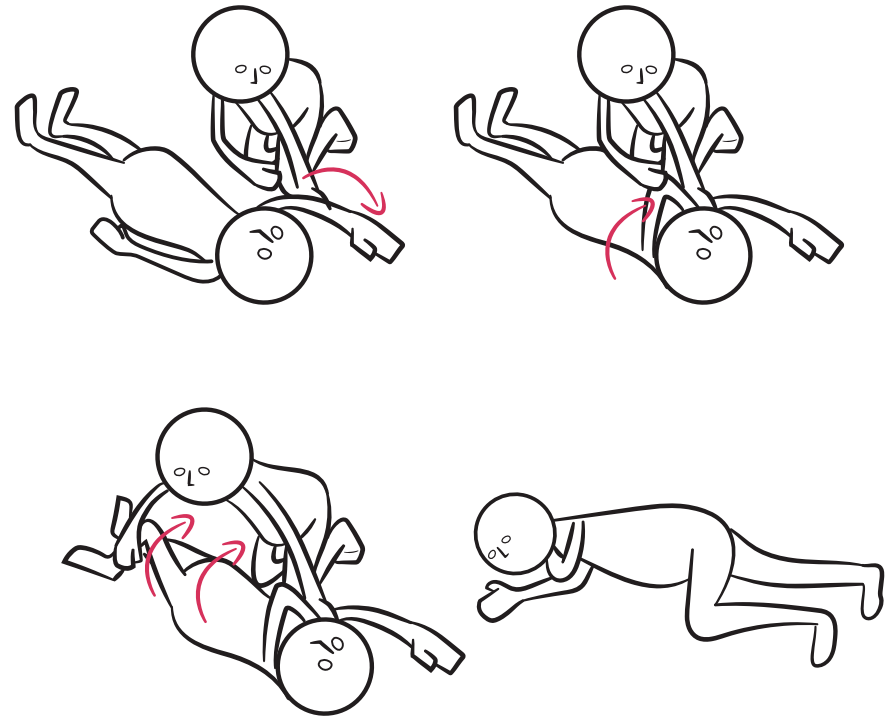


Basic first aid

Handout 6.2.1

RECOVERY POSITION

- If a person is unconscious and is breathing, they should be placed in the recovery position.
- This position ensures that someone is still able to breathe and will not choke.

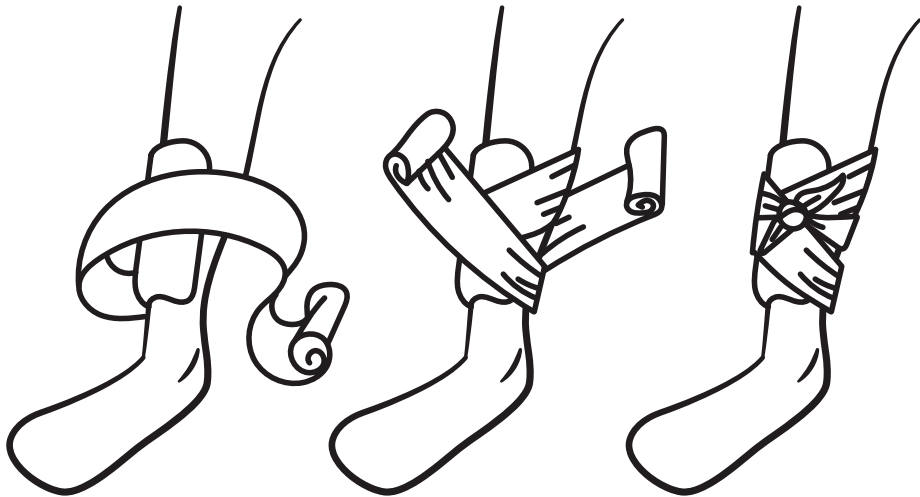


PRESSURE BANDAGE

- The pressure bandage will help you to control bleeding and reduce swelling.

How to do:

- Place a pad on the wound and wrap the bandage around the pad.
- Using normal pressure, secure the bandage.

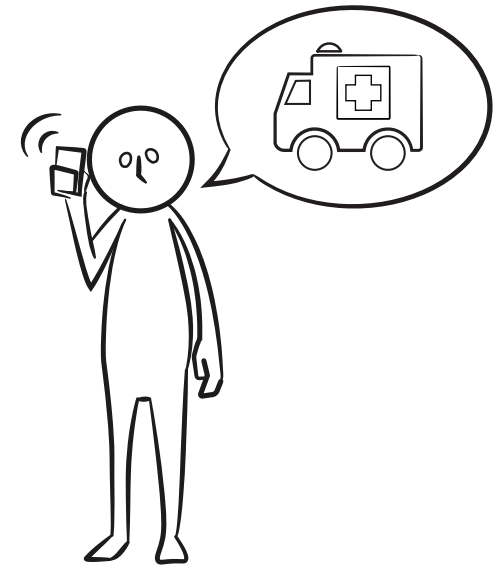


CALL THE EMERGENCY

Dial 112

Tell them:

- Your name
- Where you are
- What happened
- How many people are injured
- Wait before you end the call. Allow the emergency people to ask all their questions.

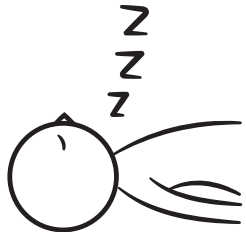


SPRAIN – MUSCLE INJURY

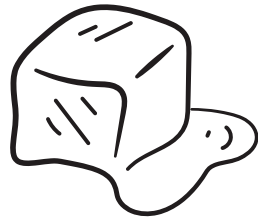
If you are playing and you misstep.

What to do:

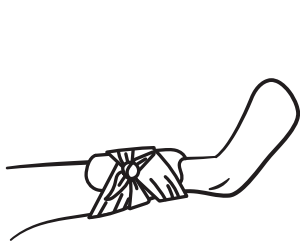
- Rest > stop doing the activity
- Ice > apply ice to the affected area
- Compression > to minimize swelling
- Elevation > raise the injured area



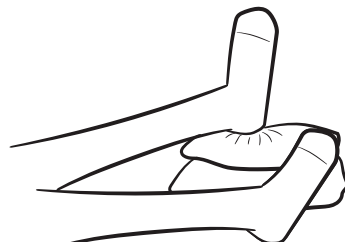
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SUNSTROKE

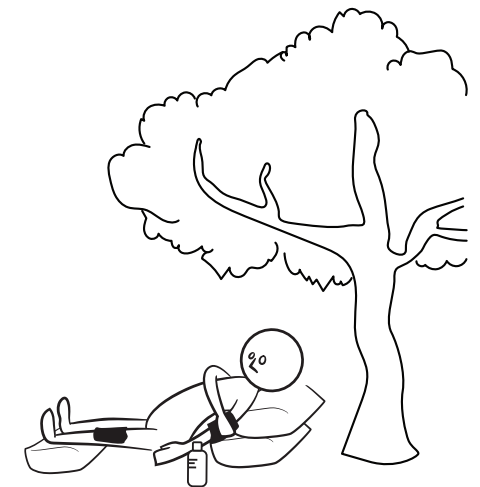
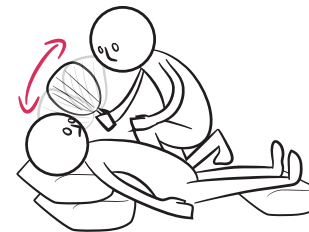
When the sun is shining on your head for a long time you can have sunstroke.

Symptoms:

- Red and hot head
- Headache
- Nausea and vomiting

What to do:

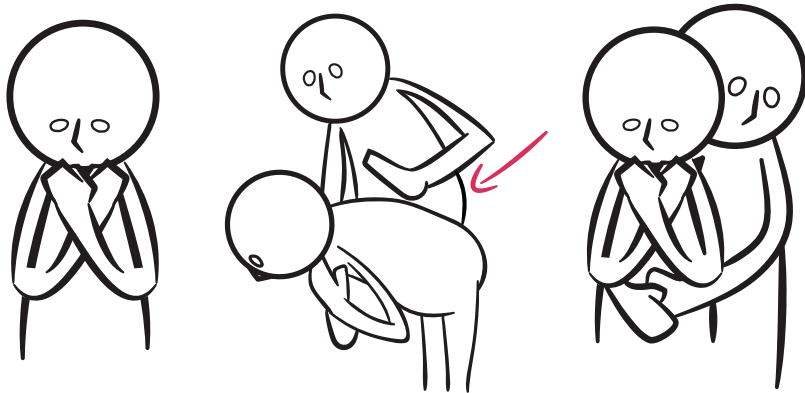
- Bring the person in the shade
- Put the person in an upright position
- Let him/her cool down



CHOKING

If somebody has eaten something and now he/she is choking:

1. Try to cough it out
2. Try to slap it out > slap on the upper back of the person
3. Try to squeeze it out > make abdominal thrusts like it is shown on the picture

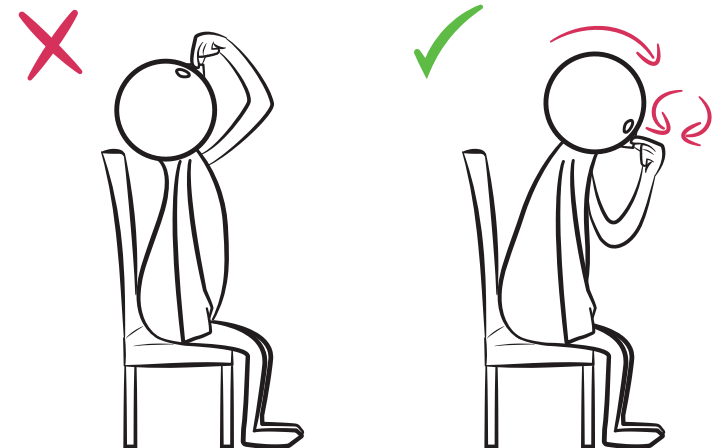


NOSE BLEED

When there is blood running out of your nose.

What to do:

- Sit up straight and tip your head slightly forward.
- Use your thumb and forefinger and pinch the soft part of your nose shut. Hold this position for 10 minutes.





Basic first aid

Worksheet 6.2.2

Name: _____

Date: _____

Class: _____

D	G	B	J	K	D	V	F	D	E	M	E	R	G	E	N	C	Y	T	O
H	K	B	Q	C	S	N	L	M	D	S	A	L	Y	P	L	F	R	S	N
N	N	A	L	O	T	J	D	E	R	D	D	V	E	L	K	A	S	C	O
A	V	S	J	M	E	B	A	N	D	A	G	E	M	V	Y	V	I	H	S
S	E	I	A	P	F	D	S	L	M	S	B	N	E	H	A	C	P	A	E
L	U	C	Y	R	F	K	C	Q	E	A	I	Q	B	R	M	T	H	N	B
Z	F	F	V	E	I	A	M	H	R	D	D	P	O	Y	S	Q	E	T	L
I	S	I	H	S	L	Z	D	C	O	R	S	E	M	E	L	I	U	A	E
B	U	R	N	S	W	I	V	S	M	K	K	F	R	G	V	N	L	L	E
J	I	S	E	I	N	B	I	U	A	A	I	V	A	N	L	P	I	G	D
P	L	T	R	O	X	A	S	P	N	S	N	N	U	C	I	C	E	C	L
Q	X	A	H	N	D	N	N	E	G	E	J	T	G	I	Z	M	R	V	H
A	S	I	R	F	E	T	H	D	G	A	U	W	E	Q	E	A	T	B	G
C	B	D	O	I	Q	U	L	Z	I	A	R	Y	D	L	H	G	U	I	N
V	Y	R	T	R	E	C	O	V	E	R	Y	P	O	S	I	T	I	O	N

ELEVATE
 BANDAGE
 EMERGENCY
 ICE
 BASICFIRSTAID
 BURNS
 COMPRESSION
 NOSEBLEED
 RECOVERYPOSITION
 REST
 INJURY
 CHOKING

EXTRA WORD: KAZIBANTU

The words are written from left to right, up to down and diagonally up- and downwards.



Food hygiene: clean water and food

Health and hygiene: Intermediate phase

Materials

- Worksheet 6.3.1 - How to keep your food safe

Aim

- Identify the most important ways that food can become contaminated.
- Increase knowledge about safe food preparation and storage.

Introduction

Introduction
Time: ~ 10 min

Introduce the class to the daily topic and ask them, 'Why is food so important for us?'

Write the answers on the blackboard, let the learners write the list down in their textbook and discuss it with the class.

Possible answers:

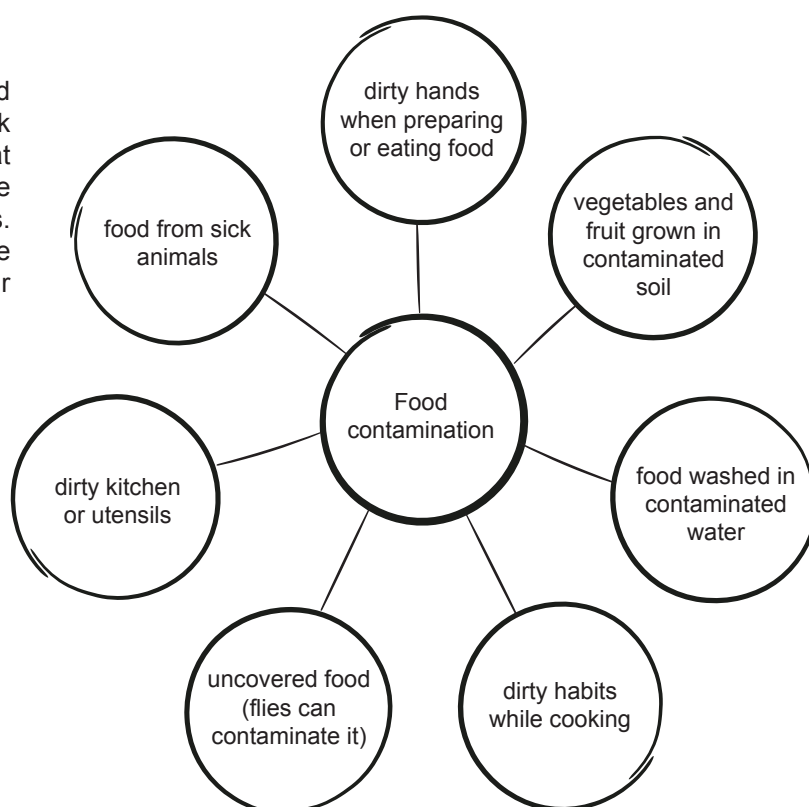
- To grow
- To live
- To have energy
- For good health
- For ceremonies and parties
- To bring family together

How food is contaminated

Introduction
Time: ~ 10 min

How to explain

The teacher should draw the circle 'food contamination' on the blackboard and ask the learners about the different ways that cause food contamination. Go through the different points and answer any questions. Let the learners draw the circles with the different contamination methods in their textbook.



Prevention

Main part
Time: ~ 15 min

How to explain

Give the worksheet 6.3.1 'how to keep your food safe' to the learners. Firstly, the teacher should discuss the topic food storage and ask the learners what they know about food storage. Instruct the learners to write down 5 important facts about food storage. They can work in pairs. The teacher must then discuss the points mentioned and write the most important points on the blackboard.

Food storage:

- Cover leftovers to keep out flies and insects that spread diseases.
- Keep the food as cool as possible (use the refrigerator or coolest place in house).
- Store dried or baked goods in an airtight tin (you can keep it for longer like this).
- Some foods such as raw meat and vegetables are more likely to be contaminated.
- Keep raw foods separate from prepared foods.
- When in doubt, don't eat the food. Rather throw it out.

Follow the same steps for the discussion on food preparation.

Food preparation:

- Wash your hands with soap before cooking.
- Wash utensils and food surfaces often to ensure they are clean.
- Wash the pots and plates after every meal.
- Use safe water for preparing foods.
- If you do not have clean water, boil the water you do get and cool it before use. Avoid cooking with contaminated water.
- Check the sell-by date on food you buy. Always buy the freshest food you can find.
- To kill the germs, cook food properly before eating it.

Instruct the learners to discuss, in pairs, what is done at their homes. Ask the learners to identify any differences. If some of the learners mention differences, discuss the differences.

As a reminder: **Cook it, boil it, peel it or forget it!**



Summary

Wrap up
Time: ~ 5 min

Repeat of what you have learnt today. Ask the learners questions about the symptoms of food contamination, storage and preparation.



How to keep your food safe

Worksheet 6.3.1

Name: _____

Date: _____

Class: _____

Storage

Preparation

Cook it, boil it,
peel it or
forget it!





Assessment: Physical activity, basic first aid & food hygiene

First and last name: _____

Date: _____

Class: _____

Mark: _____

1. Name at least three reasons why physical activity is good for your health.

1. _____
2. _____
3. _____

(3 marks)

2. Do you remember the Activity Parkour? Match the exercise to the correct capability.

- | | | | |
|--------------|--------------------------|--------------------------|---|
| Balance | <input type="checkbox"/> | <input type="checkbox"/> | Touch your feet with straight legs |
| Flexibility | <input type="checkbox"/> | <input type="checkbox"/> | Jump back and forth over the line on a single leg |
| Endurance | <input type="checkbox"/> | <input type="checkbox"/> | Walking on a rope (forwards and backwards) |
| Strength | <input type="checkbox"/> | <input type="checkbox"/> | Run as fast as possible 50 meters |
| Coordination | <input type="checkbox"/> | <input type="checkbox"/> | Do as many pushups as possible |
| Speed | <input type="checkbox"/> | <input type="checkbox"/> | Run three times around the school building |

(3 marks)



Assessment: Physical activity, basic first aid & food hygiene

3. True or False?

Call 112 for the emergency.	<input type="checkbox"/> True	<input type="checkbox"/> False
Lean your head back when your nose is bleeding.	<input type="checkbox"/> True	<input type="checkbox"/> False
The recovery position is needed for an unconscious person.	<input type="checkbox"/> True	<input type="checkbox"/> False
The pressure bandage will help you to control bleeding and reduce swelling.	<input type="checkbox"/> True	<input type="checkbox"/> False
A sunstroke is harmless.	<input type="checkbox"/> True	<input type="checkbox"/> False
'Try to slap it out' is a method when somebody is choking.	<input type="checkbox"/> True	<input type="checkbox"/> False
You need to wait before you end the call until the emergency asked all their questions	<input type="checkbox"/> True	<input type="checkbox"/> False

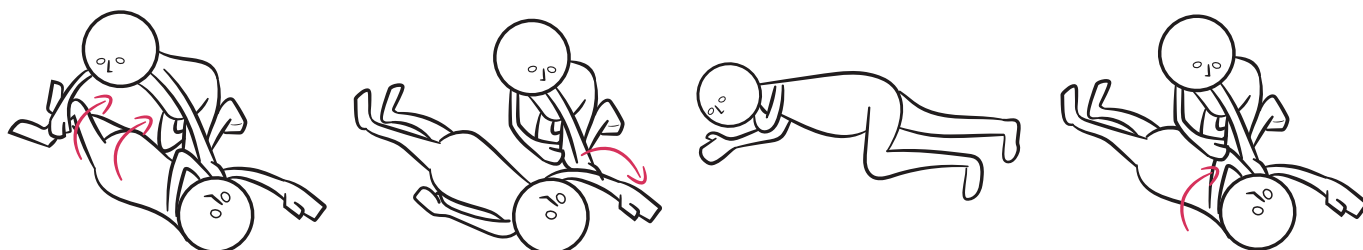
(3.5 marks)

4. Sprain – muscle injury. Remember the RICE scheme. What are the letters for?

R _____
 I _____
 C _____
 E _____

(2 marks)

5. Recovery position – put the pictures in the right order (1-4).



	1		
--	---	--	--

(1.5 marks)



Assessment: Physical activity, basic first aid & food hygiene

6. Food contamination – name at least four ways how food can get contaminated.

1. _____
2. _____
3. _____
4. _____

(2 marks)

7. Food storage. True or False?

Store raw food together with prepared food.	<input type="checkbox"/> True	<input type="checkbox"/> False
Don't eat food when in doubt.	<input type="checkbox"/> True	<input type="checkbox"/> False
Cover leftovers to keep out flies.	<input type="checkbox"/> True	<input type="checkbox"/> False
Keep food as hot as possible.	<input type="checkbox"/> True	<input type="checkbox"/> False
Raw meat and vegetables are more likely to be contaminated than other food.	<input type="checkbox"/> True	<input type="checkbox"/> False

(2.5 marks)

8. Food preparation. True or False?

Use dirty water for preparing food.	<input type="checkbox"/> True	<input type="checkbox"/> False
Cook your food with clean hands.	<input type="checkbox"/> True	<input type="checkbox"/> False
Check the sell-by date on food you buy.	<input type="checkbox"/> True	<input type="checkbox"/> False
Cook food properly before eating to kill the germs.	<input type="checkbox"/> True	<input type="checkbox"/> False
You don't need to wash your plates after a meal.	<input type="checkbox"/> True	<input type="checkbox"/> False

(2.5 marks)



Assessment Memo: Physical activity, basic first aid & food hygiene

1. Name at least three reasons why physical activity is good for your health.

- helps to maintain a healthy body
- reduces the risk of disease
- controls your weight
- strengthen your bones and muscles
- improves your mood
- better sleep

(3 marks)

2. Do you remember the Activity Parkour? Match the exercise to the correct capability.

Balance	<input type="checkbox"/>	<input type="checkbox"/>	Touch your feet with straight legs
Flexibility	<input type="checkbox"/>	<input type="checkbox"/>	Jump back and forth over the line on a single leg
Endurance	<input type="checkbox"/>	<input type="checkbox"/>	Walking on a rope (forwards and backwards)
Strength	<input type="checkbox"/>	<input type="checkbox"/>	Run as fast as possible 50 meters
Coordination	<input type="checkbox"/>	<input type="checkbox"/>	Do as many pushups as possible
Speed	<input type="checkbox"/>	<input type="checkbox"/>	Run three times around the school building

(3 marks)



Assessment Memo: Physical activity, basic first aid & food hygiene

3. True or False?

Call 112 for the emergency.	<input checked="" type="checkbox"/> True	<input type="checkbox"/> False
Lean your head back when your nose is bleeding.	<input type="checkbox"/> True	<input checked="" type="checkbox"/> False
The recovery position is needed for an unconscious person.	<input checked="" type="checkbox"/> True	<input type="checkbox"/> False
The pressure bandage will help you to control bleeding and reduce swelling.	<input checked="" type="checkbox"/> True	<input type="checkbox"/> False
A sunstroke is harmless.	<input type="checkbox"/> True	<input checked="" type="checkbox"/> False
'Try to slap it out' is a method when somebody is choking.	<input checked="" type="checkbox"/> True	<input type="checkbox"/> False
You need to wait before you end the call until the emergency asked all their questions	<input checked="" type="checkbox"/> True	<input type="checkbox"/> False

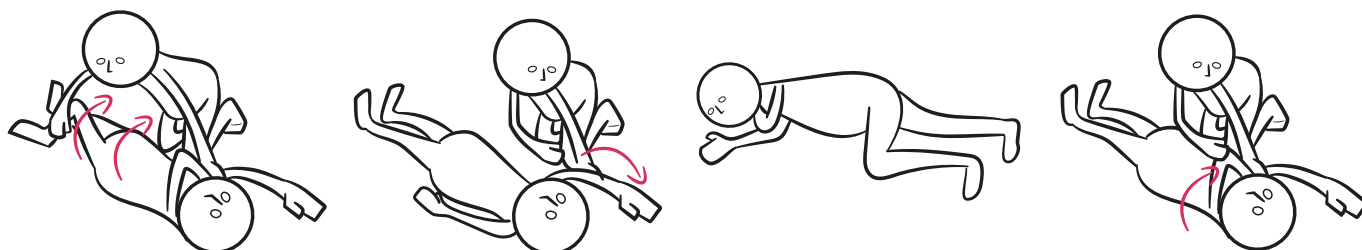
(3.5 marks)

4. Sprain – muscle injury. Remember the RICE scheme. What are the letters for?

- R Rest
 I Ice
 C Compression
 E Elevation

(2 marks)

5. Recovery position – put the pictures in the right order (1-4).



3	1	4	2
---	---	---	---

(1.5 marks)



Assessment Memo: Physical activity, basic first aid & food hygiene

6. Food contamination – name at least four ways how food can get contaminated.

- Dirty hands when preparing or eating food
- Vegetables and fruits grown in contaminated soil
- Food washed in contaminated water
- Uncovered food (flies can contaminate it)
- Dirty kitchen or utensils
- Food from sick animals
- Dirty habits while cooking

(2 marks)

7. Food storage. True or False?

Store raw food together with prepared food.	<input type="checkbox"/> True	<input checked="" type="checkbox"/> False
---	-------------------------------	---

Don't eat food when in doubt.	<input checked="" type="checkbox"/> True	<input type="checkbox"/> False
-------------------------------	--	--------------------------------

Cover leftovers to keep out flies.	<input checked="" type="checkbox"/> True	<input type="checkbox"/> False
------------------------------------	--	--------------------------------

Keep food as hot as possible.	<input type="checkbox"/> True	<input checked="" type="checkbox"/> False
-------------------------------	-------------------------------	---

Raw meat and vegetables are more likely to be contaminated than other food.	<input checked="" type="checkbox"/> True	<input type="checkbox"/> False
---	--	--------------------------------

(2.5 marks)

8. Food preparation. True or False?

Use dirty water for preparing food.	<input type="checkbox"/> True	<input checked="" type="checkbox"/> False
-------------------------------------	-------------------------------	---

Cook your food with clean hands.	<input checked="" type="checkbox"/> True	<input type="checkbox"/> False
----------------------------------	--	--------------------------------

Check the sell-by date on food you buy.	<input checked="" type="checkbox"/> True	<input type="checkbox"/> False
---	--	--------------------------------

Cook food properly before eating to kill the germs.	<input checked="" type="checkbox"/> True	<input type="checkbox"/> False
---	--	--------------------------------

You don't need to wash your plates after a meal.	<input type="checkbox"/> True	<input checked="" type="checkbox"/> False
--	-------------------------------	---

(2.5 marks)

Scale of achievement: Grading

Description of competence	Percentage	Final mark
Outstanding achievement	80-100	7
Meritorious achievement	70-79	6
Substantial achievement	60-69	5
Adequate achievement	50-59	4
Moderate achievement	40-49	3
Elementary achievement	30-39	2
Not achieved	0-29	1



Food hygiene: safe and harmful ingredients

Nutrition: Intermediate phase

Materials

- Food Hygiene: Safe and Harmful Ingredients Poster
- Board and Board Markers
- Popular beverage or snack (for the ice-breaker)
- Handout 6.4.1
- Cereal boxes (ask the learners to help you collect boxes over a time) or
- Printed nutritional information of different cereals
- Learners favourite snack wrapper or packaging (ask the learner to bring this to class)
- Handout 6.4.2
- Worksheet 6.4.3
- Crayons or Pencils

Aim

- Define 'nutrients'.
- Understand carbohydrates, proteins and fats.
- Become familiar with ingredients such as sugar and sodium.
- List three types of food additives and identify their functions.
- Understand what processed foods are.

Introduction

Introduction
Time: ~ 3 min

Welcome the learners, introduce the daily topic and summarise the planned lesson.

Ice breaker

Show the class a popular snack food or beverage that is still in its packaging. Ask the class what they think is in it. Read out some of the ingredients from the food label. Ask the learners if any of the terms are recognisable to them. Point out that we do not always know what is in the food we eat.

Group discussion

Introduction
Time: ~ 15 min

Ask the learners: 'Does anyone know what nutrients are? What are carbohydrates? Proteins? Fats?'

Possible answers:

- Foods are made up of different nutrients. Nutrients help our bodies to stay healthy and function as it should.
- Carbohydrates are the body's main source of energy. Examples are bread, rice and potato.
- Proteins are the building blocks of the body. They are important for growth and repair (healing). Proteins also help build muscle, keep the organs strong and fight off disease. Examples include meat, fish, chicken, eggs, beans, lentils, milk, amasi, yoghurt and cheese.
- Fats are a concentrated source of energy. Fats are also important for growth and development. We do not need large amounts of fat to meet our nutrient requirements. Large amounts of unhealthy fats can lead to illness. Examples of healthy fats are avocado, canola oil and peanut butter.

The teacher should write the following on the board:

Nutrients:

Carbohydrates (bread, rice and potato) —————> Ready to use energy

Proteins (meat, eggs and milk) —————> Growth and repair (healing)

Fats (canola oil and avocado) —————> Concentrated source of energy, growth and development



Group discussion

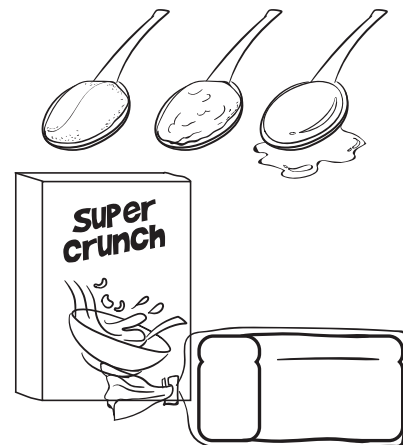
Continued

Teacher's top tip: The teacher must explain to the class, as a rule, that the margarine in the tub (soft tub margarine) is healthier than the brick (hard) margarines. Oils such as canola and sunflower oils are a better choice than margarines. Point out that not all fats are 'unhealthy'. We need healthy fats in our diet, however a little goes a long way.

Ask the learners: 'What is sugar? Are foods high in sugar healthy? What happens if we include large amounts of sugary foods in our diet?'

Possible answers:

- Sugar is a sweet substance that is used to sweeten many foods and drinks. There are many types of sugar found in the processed foods we eat.
- Processed foods are foods that have been changed or processed before it is sold. A large amount of the food we eat is processed for example bread, cereals, polony, pasta, rice, beef burgers Etc.
- We should limit the amount of sugar we eat. Too much sugar in our diet can lead to harmful conditions such as obesity, tooth decay and heart disease.
- There are many hidden sugars in the processed food that we eat. We also add extra sugar to our foods (e.g. sugar in tea or with cereal).



Ask the learners: 'What is sodium? What are some of the possible health effects of a high sodium diet?'

Possible answers:

- Sodium is salt.
- Processed foods are often high in sodium.
- Although the body does need a small amount of salt, too much salt can lead to high blood pressure, heart disease and stroke.

Food additives are added to foods and drinks during processing. Some of the additives include flavourants, colourants and preservatives.

Write the words 'Additives', 'Flavourants', 'Colourants' and 'Preservatives'.

The teacher must explain to the learners that manufacturers put many ingredients into the foods for many different reasons. Some of these ingredients can be unhealthy if we eat too much of them.

Preservatives make food last longer. Therefore, some food can last for many weeks or even months e.g. tinned food, cereals etc.

Flavourants add taste to the food and this makes people want more of the product e.g. BBQ flavoured chips (crisps).

Colourants add colours to food e.g. brightly coloured sweets or soft drinks. By law, additives need to be labelled clearly on food as certain additives may not be tolerated by certain people.



Teacher's top tip: explain to the learners that a lot of the time we may be unaware that the foods we eat contain these ingredients. Therefore, fresh, unprocessed foods such as fruits and vegetables or unprocessed proteins such as fish, chicken, beans and lentils are the healthier choice. We should try to include unprocessed foods in our diets often.

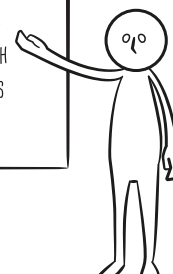
Find the hidden sugar

Main part
Time: ~ 15 min

Distribute handout 6.4.1. This handout lists the different names of added sugars found in foods. There are many different types of sugar found in the processed foods we eat. These sugars have many different names. Instruct the learners to work in pairs and ask them to identify whether the cereal contains any hidden sugars. Together as a class decide which cereals are healthier choices than others.

The teacher should draw two columns on the board with the headings 'less sugar' and 'more sugar'. Ask the learners to call out which column they think their cereal belongs to.

LESS SUGAR	MORE SUGAR
BRAN	CHOCO BITS
WHEATFIX	SUPER CRUNCH
G'MORNING GRAINS	HONEY CUBES



Activity

Main part
Time: ~ 5 min

Review what you know about food additives

Direct the learners to complete Worksheet 6.4.3. This worksheet instructs the learners to fill in the blanks (missing words). They should refer to Handout 6.4.2. for the answers.

Summary

Wrap up
Time: ~ 2 min

Ask the learners what they have learned today. Create a discussion about the topic that processed foods contain many hidden ingredients. Some of these ingredients, such as sugar and salt, are unhealthy for us in large quantities. Instruct the learners that when they have a choice between processed or fresh foods, fresh foods is the better option.



Types of sugar in foods

Handout 6.4.1

Sugar

Dextrose

Brown sugar

Corn sweetener

High fructose corn syrup

Invert sugar

Maltose

Honey

Molasses

Cane sugar

Fructose

Glucose

Raw sugar

Sucrose

Corn syrup

Corn sweetener



Food additive fact sheet

Handout 6.4.2

What are additives?

Food additives are chemicals found in a lot of the processed foods and drinks. Some of the commonly used food additives are preservatives, colourants and flavourants. You can identify the additives in the food by their name or E-number.

Preservatives

Preservatives prevent food from becoming mouldy or stale. They preserve the shelf life of food (makes the food last longer). Some of the common preservatives in foods are listed below:

- **Sulphites**

Examples: sodium sulphites, sulphur dioxide and potassium sulphite

Functions: prevent browning, prevent bacterial growth and food spoilage, improve textures and bleach certain foods

- **Benzoates and parabens**

Examples: sodium benzoate, benzoic acid and butylparaben

Functions: prevent microbial spoilage (fungi, bacteria and yeasts)

- **Nitrates**

Examples: Sodium nitrite and sodium nitrate

Functions: preserves (cures) meats and dyes meat red

Colourants

Colourants adds colour to food (often bright colours). Manufacturers use colourants to make their products more appealing to customers (especially children)

Examples: tartrazine, sunset yellow and allura red

Flavourants

Flavourants add flavour and aroma to food. Some flavourants occur naturally e.g. herbs or spices. Artificial flavourants are created artificially using chemicals.

Examples: monosodium glutamate and adipic acid



Safe and harmful ingredients

Worksheet 6.4.3

First and last name: _____

Date: _____

Class: _____

Review what you know about food additives.

Use the word bank to fill in the blank spaces in the sentences below.

Word bank:

food additives flavour preservatives sulphites aroma
monosodium glutamate manufacturers nitrates colourants

1. _____ are used to preserve (cure) meats.
2. Flavourants add _____ and _____ to foods.
3. _____ prevents food from becoming brown and prevents food spoilage.
4. _____ are chemicals found in processed foods. Examples of these chemicals include preservatives, flavourants and colourants.
5. _____ use _____ to make their products more appealing to customers (especially children).
6. _____ is an example of a food flavourant.
7. _____ preserves the shelf life of food and makes the food last longer.

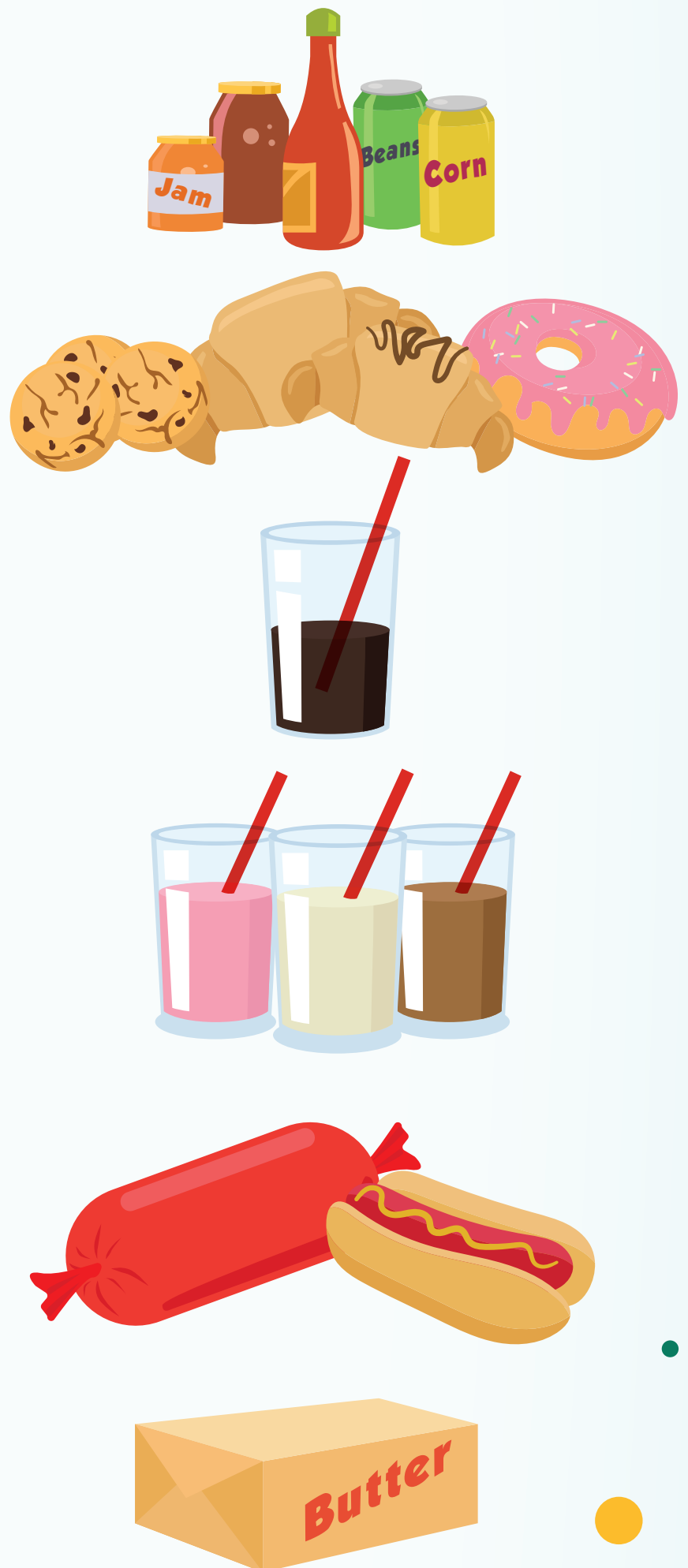
EAT AS NATURE INTENDED

Fresh and unprocessed foods are packed full of nutrients.
Choose fresh foods as often as possible. Enjoy food as nature intended.

**Choose fresh
more often**



**Choose processed
less often**





Reading labels

Nutrition: Intermediate phase

Materials

- Board and board markers
- Printed copies of food Label (which includes nutritional information and ingredients listed)
- Worksheet 6.5.1
- Cardboard (1 large sheet for each group)
- Food/snack/beverage in it's packaging with nutritional label information (the learners can bring their own – have a few extras in case a learner forgets)
- Crayons or Pencils

Aim

- Understand how to read or understand a food label.
- Identify healthier food choices based on the information on the food label.
- Recognise that fresh, unprocessed foods are often the healthier choice.

Introduction

Introduction
Time: ~ 3 min

Welcome the learners, introduce the daily topic and summarise the planned lesson.

Link with previous lesson: As the teacher did the previous lesson, hold up a snack or beverage item. Ask the learners, based on the previous lesson, what they think the ingredients in the product are? Remind the learners that we often do not know what is in the food we eat. Link this discussion with the group discussion below.

Group discussion

Introduction
Time: ~ 10 min

Ask the learners:

'We know that sometimes we are not sure of what ingredients are in the food we eat. Does anyone know where we can find this information?'

Possible answers:

- By reading the nutritional information label.

'Why do you think it is important for products to have nutritional information labels?'

Possible answers:

- For us to make educated decisions about the food that we eat.
- To allow us to make healthy decisions about the foods we buy.
- To allow people with allergies or food sensitivities to check whether the product is safe for them to eat.

Handout a printed copy of a food label to each learner. Discuss what information is included and what the information means. Highlight a few key points:

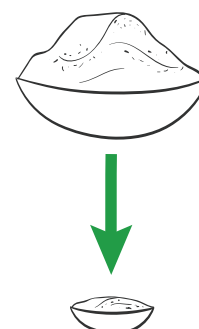
WHITE BREAD
TYPICAL NUTRITIONAL INFORMATION

Serving size: 2 slices (80g)

NUTRIENTS		Per 100 g	Per serving
Energy	(kJ)	992	793
Protein	(g)	10.5	8.4
Glycaemic Carbohydrate	(g)	38	31
of which total sugar	(g)	3.1	2.5
Total Fat	(g)	3.1	2.4
of which saturated fat	(g)	1.3	1.1
of which trans fat	(g)	<0.1	<0.1
of which monounsaturated fat	(g)	0.8	0.7
of which polyunsaturated fat	(g)	0.9	0.8
Cholesterol	(mg)	<3	<3
Dietary Fibre#	(g)	6.3	5.1
Total Sodium	(mg)	378	302
VITAMINS			
Vitamin A (Retinol)	(ug)	169	135
Vitamin D (Cholecalciferol)	(ug)	3	2
Vitamin K	(ug)	23	18
MINERALS			
Calcium	(mg)	243.8	195
Iron	(mg)	3.4	2.7
Selenium	(ug)	10	8
Zinc	(mg)	2.1	1.7
GI			
Glycaemic Index (GI)		≤ 55	-
Glycaemic Load (GL)		-	16

- The recommended serving size: this is usually the recommended amount or quantity that the manufacturer recommends you eat at one time. The recommended serving size is the amount that is used to calculate the nutritional information. For example, if the recommended serving size is 30g of cereal and you have 60 g of cereal, you would double the nutritional information on the label to calculate your portion's nutritional content. The nutritional information table also usually shows values for the amount of nutrients contained in 100 grams (g) or 100 millilitres (ml) of the product.

- The nutritional information table: this table gives the amount or quantity of energy, carbohydrate, fats, proteins, sugar, fibre, sodium and vitamins and/or minerals found in the food. This information can be useful, especially if you are trying to limit a certain type of ingredient. For example, you can check the sugar content if you are following a low sugar diet.



Continued

- INGREDIENTS: WHOLE WHEAT FLOUR, WATER, WHEAT GLUTEN, HIGH FRUCTOSE CORN SYRUP, HONEY, MOLASSES, YEAST. CONTAINS 2% OR LESS OF: WHEAT BRAN, SOYBEAN OIL, SALT, CALCIUM SULFATE, DOUGH CONDITIONERS (SODIUM STEAROYL LACTYLATE, ETHOXYLATED MONO AND DIGLYCERIDES, CALCIUM DIOXIDE AND/OR AZODICARBONAMIDE), SOY FLOUR, YEAST NUTRIENTS (AMMONIUM CHLORIDE, AMMONIUM SULFATE AND/OR MONOCALCIUM PHOSPHATE), VINEGAR, CALCIUM PROPIONATE (TO RETAIN FRESHNESS), WHEY, SOY LECITHIN. CONTAINS WHEAT, MILK AND SOYBEANS.

By reading and understanding the food label and ingredient list of foods, we can become wise about the foods we eat. We can make healthier choices more often.


Main part
Time: ~ 10 min

Teacher' top tip: Ask the learners why they think certain foods (such as beverages and sweets) are brightly coloured and other naturally occurring fruits are also brightly coloured? Ask the learners what they think the difference between the two is? Also ask why they think manufacturers dye their products bright colours? Naturally occurring, brightly coloured fruit and vegetables are usually packed full of nutrients and are very healthy. However, this is usually not the case with processed foods. Manufacturers dye their products bright colours to make their products more appealing to customers and eye-catching (especially to learners).

Main part
Time: ~ 15 min

VEGGIE BITES

BAKED VEGETABLE CHIPS



BAKED NOT FRIED NO ADDED PRESERVATIVES

LOCALLY SOURCED ORGANIC INGREDIENTS

Ingredients:
Fresh pressed vegetables (cucumbers, celery, kale, tomatoes, carrots, beets, parsnips),
high quality sunflower oil, salt, flour, sweet potato, sunflower brown rice
flour, red lentil flour, white sesame seeds, ground onion, sea salt, *organic

Wrap up
Time: ~ 2 min

Page 2 of 2



Nutrition fact finder

Worksheet 6.5.1

First and last name: _____

Date: _____

Class: _____

Answer the following questions about your product:

1. Why do you think a customer would buy this product? What makes the product appealing to the customer?

2. Do you think any food additives (flavourants, colourants or preservatives) have been added to the product? If so, why?

3. What are the first three ingredients listed? Are there any complicated or difficult words on the packaging that you cannot pronounce?



Nutrition fact finder

Worksheet 6.5.1

4. Is this product high in sugar, fat or salt? Explain your answer?

5. What is the recommended portion size for the product? If you had to eat this product, would this be a suitable portion for you? Or would you eat less or more of the product at one time?

6. Is this product a healthy choice? Explain your answer.

7. If your answer to the above question is no, what would you recommend as a healthy alternative?

KNOW THE NUTRITION FACTS.

What’s really in your food? Do you know what you are eating? Learning how to read food labels can help you make healthier choices!

Portion/Serving size

The Nutritional Information is based on one portion or serving size. Look at the serving size and how much of the product you should eat at one time. If you double the servings you eat, you need to double the nutritional information too.

Ingredient list

The ingredients are listed in decreasing weight. This means that the ingredients present in the largest amounts must be listed first. For example, if you see sugar near the top of the list, you know that it is one of the main ingredient in the product.

NUTRITIONAL INFORMATION

Amount Per Serving

Calories	240	Vitamin A 100%	Vitamin C 100%
Calories from Fat	108	Calcium 20%	Iron 100%
% Daily Value*			
Total Fat 12g	18%	Thiamin (B1) 100%	
Saturated Fat 3g	15%	Riboflavin (B2) 100%	
Cholesterol 3mg	1%	Niacin 100%	
Sodium 140mg	6%	Vitamin E 100%	Vitamin D 100%
Total Carbohydrates 30g	10%	Pyridoxine HCL (B6) 100%	
Dietary Fibre 0g	0%	Folic Acid 100%	
Sugars 12g		Vitamin B12 100%	Phosphorous 10%
Protein 4g		Iodine 100%	
		Pantothenic Acid (B5) 100%	
		Zinc 100%	Manganese 100%

* Percent Daily values are based on a diet of other people's secrets.
Your daily values may be higher or lower depending on your calorie needs:

Total Fat	Calories	2,000	2,500
Sat.Fat	Less than	65g	80g
Cholesterol	Less than	20g	25g
Sodium	Less than	300mg	300mg
Total Carbohydrate	Less than	2,400mg	2,400mg
Dietary Fibre		300g	375g
Calories per gram:		25g	30g
Fat 9	Carbohydrate 4		Protein 4

INGREDIENTS

Non-fat Dry Milk Solids, Sucrose, Vegetable Oils (including Sunflower and/or Safflower Oil), Calcium Phosphate, Ascorbic Acid, Vitamin E Acetate, Niacinamide, Ferrous Fumarate, Zinc Gluconate, Natural and Artificial Flavours, Calcium Pantothenate, Potassium Pyridoxine Hydrochloride, Riboflavin, Thiamin Hydrochloride, Vitamin A Palmitate, Vitamin D3, Folic Acid, Potassium Iodid, Cyanocobalamin.

Nutritional information

This table provides the amount or quantity of energy, carbohydrate, fats, proteins, sugar, fibre, sodium and vitamins and/or minerals found in the food. This information can be useful, especially if you are trying to limit a certain type of ingredient. For example, you can check the sugar content if you are following a low sugar diet.



Safe food preparation and storage

Nutrition: Intermediate phase

Materials

- Safe Food Preparation and Storage Poster
- Board and board markers
- Handout 6.6.3.
- Paint (non-toxic), preferably red
- Bowl to mix paint in
- Bowl to place the 'food items' in
- Water
- Suitable items to represent food
- Cutting board
- Butter (not sharp) knife
- Worksheet 6.6.2
- Pencils, crayons or pens

Aim

- Define 'food borne illness', 'microorganisms' and 'cross-contamination'.
- Identify that improper handling of food may lead to illness.
- Understand the role of microbes and the conditions necessary for their growth.
- Identify plans to prevent microbial growth.
- Identify suitable storage methods of food.
- Define 'cross-contamination' and how to prevent it.

Introduction

Introduction
Time: ~ 3 min

Welcome the learners, introduce the daily topic and outline the planned lesson.

Ice breaker

The teacher should hold out his/her hand. Ask the learners if they look clean? Ask the learners to hold out their hands and ask them if they think their hands are clean? Ask the learners whether they think there are any bacteria on their hands? It may be a surprise to know that there are on average about 1500 bacteria on every square meter of the skin! That's a lot of bacteria that we can't even see.

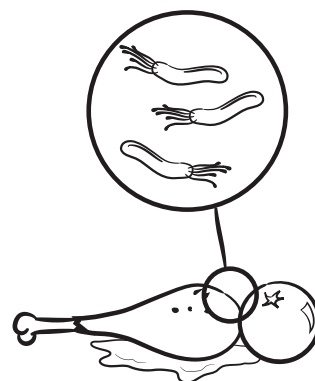
Group discussion

Introduction
Time: ~ 10 min

Ask the learners: 'What is food poisoning? Has anyone ever become ill after eating food? How does a previously safe food become unsafe to eat?'

Possible answers:

- Food poisoning is an illness caused by bacteria or other harmful substances on food. When unsafe foods cause illness, we call this a food borne illness.
- Food borne illness or disease is caused by eating food that is infected by bacteria or other unsafe microorganisms.
- Microorganisms are tiny bacteria, viruses or fungi that we cannot see with the naked eye.
- Some microorganisms cause illness and disease.
- If we do not treat food in a safe manner or if food becomes old, bad microorganisms (especially bacteria) grow on the food and it becomes unsafe to eat.



Write the words 'food borne illness' and 'microorganisms' on the board.

Teacher's top tip: Explain to the learners that micro means very small and organism means a living creature. Just as we are organisms (alive), so are microorganisms. They are just too small to see.

Teacher's top tip: Explain to the learners that not all microorganisms are bad. Everything around us, including our bodies, are covered in millions of bacteria. These bacteria are harmless. However, there is disease causing bacteria too. We need to treat food in a safe way to prevent the disease-causing bacteria from reaching and spreading on the food we eat.

Group discussion

Continued

Ask the learners: 'Now that we know that disease causing microorganisms (and especially bacteria) can cause our food to become unsafe to eat. Can anyone name a way that we can keep food safe in his/her home?'

Possible answers:

- There are many answers to this. The aim of the question is to allow the learners to think of their own home environments and begin to think of food safety in a practical way. Accept all appropriate responses and create an open discussion around the topic.



Tell the learners that to keep food safe, we need to prevent bad bacteria from growing or spreading on our food. Bacteria are not that different from humans. Just as we need things like food, water and certain temperatures to survive and thrive, so do bacteria.

Touch on the main points of Handout 6.6.1. with the learners. Explain to the learners that if we can prevent bacteria from growing and thriving, we can keep our foods safe.

Cross-contamination demonstration

Main part
Time: ~ 15 min

The aim of this activity is to show the learners how bacteria are spread in the kitchen.

Firstly, the teacher must ask the learners if they would eat raw chicken. Ask the learners why they would not eat raw chicken. Explain that chicken is a high-risk protein food that contains unsafe (disease causing) bacteria. If we eat raw chicken, we may become very ill. Then, ask the learners if they would eat a raw tomato? Explain to the class, generally, raw tomatoes are safe to eat as they are not a high-risk food. Finally, ask the learners if the tomato is still safe to eat if the raw chicken touched the tomato? The tomato may be unsafe to eat as the unsafe bacteria could have moved from the raw chicken onto the tomato. This is called cross-contamination.

How to demonstrate

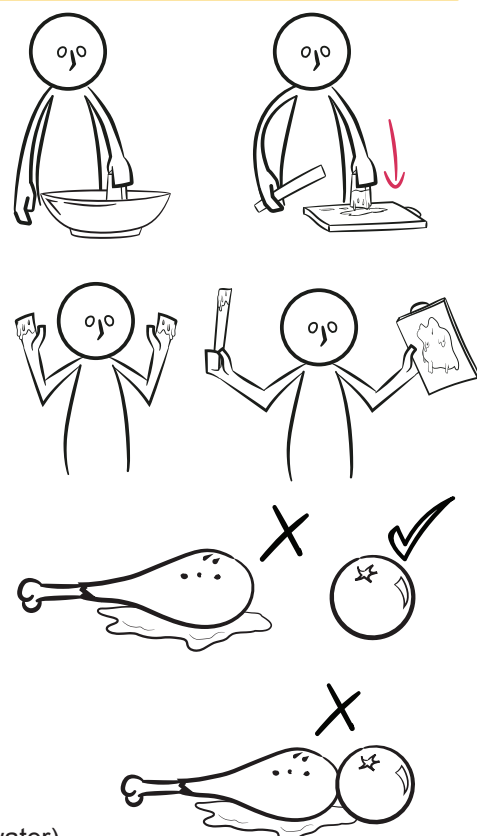
Put paint into a bowl and add a little water to the paint (water down the paint slightly). Hold up one of the items you have chosen to represent food. Explain to the learners that this is 'raw chicken'. Tell the learners that the paint represents the disease-causing bacteria. Dip the 'raw chicken' into the paint and place it on a cutting board. Explain to the learners that you are cutting up the raw chicken for a delicious chicken stew. Put the raw chicken in the bowl. Hold up your hands to the class to show that the bacteria have spread onto your hands. Hold up the cutting board and knife to show the 'bacteria'.

Next, explain to the learners that you are going to make a fresh salad to accompany the chicken stew. Pick up the second item and explain to the class that this is a fresh, juicy tomato. Pretend to cut up the 'tomato' on the cutting board. Hold up the 'tomato' to the class and explain to the class that the dangerous bacteria are now on the tomato. Explain that your hands, the knife and the cutting board spread the germs from the raw chicken to the tomato. The tomato was previously safe to eat but now it may cause you to become sick as it came into contact with dangerous bacteria.

Ask the class what you could have done to prevent cross-contamination?

Possible answers:

- Washed hands between tasks.
- Used a different cutting board and knife.
- Washed the cutting board and knife between tasks (with hot, soapy water).



Cross-contamination demonstration

Continued

Create a discussion on how cross-contamination occurs at home and how it can be prevented. Otherwise, learners can work in pairs/groups and brain storm ideas to prevent cross-contamination at home. These ideas can be presented to the class.

Some of the scenarios where cross-contamination can occur are listed below:

- Not washing hands before working with food.
- Working with food when you are sick.
- Cutting raw meat/chicken/fish on cutting board and not washing the board before cutting something else.
- Touching raw meat/chicken/fish and not washing hands before touching other food.
- Using the same plate/bowl for cooked meat as used for raw meat (this could easily happen at a braai for example).
- Not washing hands after sneezing or blowing nose.
- Storing fresh fruits/vegetables or cooked foods near or below meat/chicken in the refrigerator (juices from raw meat can drip down on to other food).
- Preparing food with a cut on your hands.
- Using the same spoon to taste and stir food.
- Drying dishes with a kitchen towel.
- Pets licking dishes.

Conditions in which bacteria grow

Main part
Time: ~ 10 min

Instruct the learners to complete worksheet 6.6.2 by matching the boxes.

The aim of this worksheet is for learners to begin to think about practical ways to prevent bacterial growth.

Summary

Wrap up
Time: ~ 2 min

Ask the learners what they have learnt today. Highlight that food safety is a serious issue. Food borne illness can lead to serious disease and even death. Small things we do can have serious consequences. Remind the learners that sometimes a food seems safe to eat but it may not be. End the session by motivating the learners to follow safe food handling practices at home.



Conditions necessary for bacteria growth

Handout 6.6.1

Food

Just as we do, bacteria need food to grow and multiply. High protein foods such as meat, poultry, dairy products and eggs have a high risk of growing bacteria.

Water (moisture)

Bacteria need water to grow and multiply. To help limit bacterial growth, we can limit the amount of water available to bacteria. Foods such as dried fruits and biltong are dehydrated to remove the water. Cereals, uncooked pasta shells and uncooked rice are examples of foods that have very little water available to the bacteria. Therefore, these foods have a longer shelf life and do not need to be stored in the refrigerator. Other foods, such as jams, or pickled products have large amounts of sugar or salt added to them. The water combines with the sugar or salt and becomes unavailable to the bacteria. However, these products do require refrigeration once they have been opened.

Temperature

Just as we cannot handle very hot or cold temperatures, bacteria need a warm environment in which to grow. Bacteria grow best at temperatures between 6°C - 65°C. We call this the temperature danger zone. We can control bacterial growth by keeping our foods out of this temperature danger zone. Storing food in the fridge or freezer slows down (fridge) or stops (freezer) bacterial growth. Bacteria still can grow slowly in the fridge. So, leftover food should not be stored for longer than 2 to 3 days in the fridge. Cooking foods at high temperatures kill the bacteria. We should make sure that we cook our food thoroughly.

Time

Bacteria need time to grow. When foods are kept in the temperature danger zone, bacteria numbers can double every 20 minutes. Keeping cooked or risky foods at room temperature may be dangerous. Hot foods should be kept hot, and cold foods should be kept cold.

Acidic Foods

Bacteria don't grow very well in acidic foods. Bacteria typically do not grow in alkaline food, such as crackers, or highly acidic food such as lemons.



Prevent bacterial growth

Worksheet 6.6.2

First and last name: _____

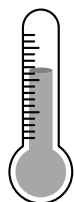
Date: _____

Class: _____

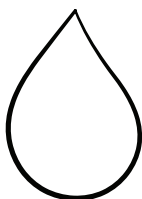
Bacteria needs a certain environment in which to grow. Our job is to prevent this environment.

Show how you would do this by matching the boxes below.

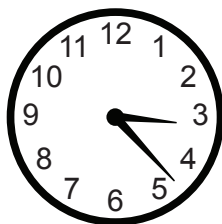
ENVIRONMENT



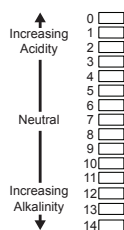
Temperature

☐


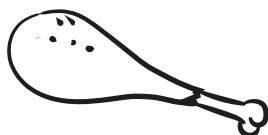
Water

☐


Time

☐


Acidity

☐


High protein foods

☐

PREVENTATIVE STRATEGY

☐

Left-over food should not be kept for longer than 2 to 3 days.

☐

Citric acid is often used to preserve sweets and other foods

☐

Cooked foods should kept in the danger zone. Hot foods should be kept hot. Cold foods should be kept cold.

☐

High risk foods should be stored correctly and cooked thoroughly. We should be extra cautious with these foods.

☐

Certain risky foods with a high moisture content should be stored in the fridge or freezer e.g. cheese, meat, chicken, fish, cut fruits and vegetables.

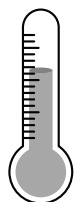


Prevent bacterial growth

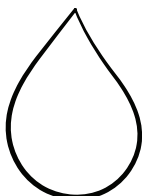
Worksheet 6.6.2 (Memo)

Bacteria needs a certain environment in which to grow. Our job is to prevent this environment. Show how you would do this by matching the boxes below.

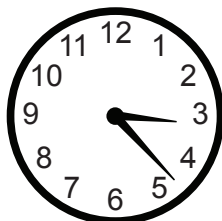
ENVIRONMENT



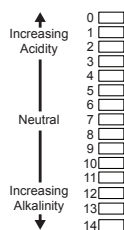
Temperature



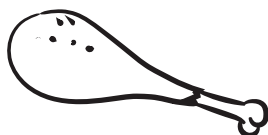
Water



Time



Acidity



High protein foods

PREVENTATIVE STRATEGY

Left-over food should not be kept for longer than 2 to 3 days.

Citric acid is often used to preserve sweets and other foods

Cooked foods should kept in the danger zone. Hot foods should be kept hot. Cold foods should be kept cold.

High risk foods should be stored correctly and cooked thoroughly. We should be extra cautious with these foods.

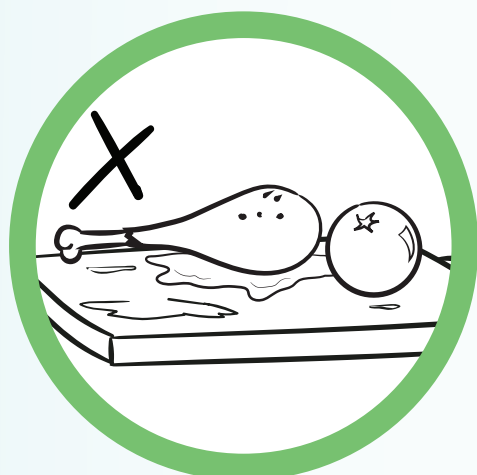
Certain risky foods with a high moisture content should be stored in the fridge or freezer e.g. cheese, meat, chicken, fish, cut fruits and vegetables.

SAFE FOOD PREPARATION & STORAGE



Clean as you go

- ✓ Wash your hands before touching food
- ✓ Remember to wash your hands often while preparing food
- ✓ Keep kitchen surfaces and utensils clean
- ✓ Keep the kitchen free from insects and pests



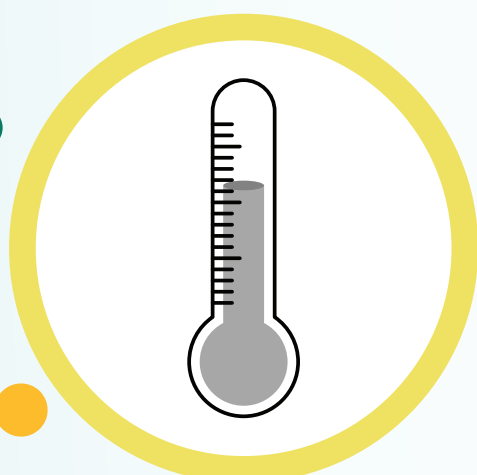
Separate raw and cooked

- ✓ Separate raw meat, chicken and fish from other foods
- ✓ Use separate cutting boards, utensils and other equipment for raw foods
- ✓ Store foods in containers to separate raw foods from cooked foods to prevent cross-contamination



Cook thoroughly

- ✓ Ensure your meat, chicken and fish are cooked thoroughly
- ✓ Allow dishes such as soups and stews to boil to make sure the food reaches 70°C
- ✓ Juices from meat and poultry should be clear and not pink
- ✓ Make sure to reheat leftovers thoroughly



Keep food at safe temperatures

- ✓ Do not keep cooked food at room temperature for longer than 2 hours
- ✓ Keep hot food hot and cold food cold
- ✓ Do not keep food too long, even when stored in the refrigerator
- ✓ Do not defrost food at room temperature or in water



Use safe water and raw materials

- ✓ Use water from a safe source or treat it to make it safe
- ✓ Choose fresh foods
- ✓ Choose products that have been processed for your safety e.g. pasteurized milk
- ✓ Wash fruit and vegetables well
- ✓ Do not consume expired foods and beverages



Assessment: Nutrition

First and last name: _____

Date: _____

Class: _____

Mark: _____

1. Find the hidden words using the clues provided.

B	U	R	P	L	T
S	B	R	E	A	D
B	A	I	A	B	S
O	C	S	N	E	A
P	T	K	U	L	L
T	E	M	T	S	T
F	R	I	D	G	E
I	I	L	U	O	V
S	A	K	R	F	W
H	A	N	D	S	Z
C	A	N	O	L	A

1. This microorganism causes food to become unsafe and can cause food-borne illness.
2. Choose the brown or whole-wheat version of this carbohydrate food for a delicious sandwich.
3. This high protein food is found in the oceans and rivers.
4. A useful source of information that helps us make informed decisions about the we eat.
5. Wash your _____ before touching food.
6. It is important to cook high _____ foods well. Example of these foods include chicken and pork.
7. We use this household appliance to keep food chilled.
8. This allergenic nut makes a delicious, healthy butter that can be enjoyed on toast.
9. Eating too many foods high in this food additive can cause high blood pressure, heart disease and stroke.
10. This oil is an example of a healthy fat and a concentrated source of energy.

(10 marks)



Assessment: Nutrition

2. Using words from the word bank, fill in the missing words below.

Word Bank:

Fridge

Serving

Additives

Raw

Hot

1. Separate _____ and cooked foods.
2. Keep cold food cold and hot food _____.
3. Milk, yoghurt and cheese should be stored in the _____.
4. The recommended _____ size is the amount of food the manufacturer recommends you eat one time.
5. Food _____ are added to some processed foods. (5 marks)

3. Name 2 reasons why it is important to read food labels.

1. _____
2. _____ (2 marks)

4. Name 3 types of food additives.

1. _____
2. _____
3. _____ (3 marks)

Description of competence	Percentage	Final mark
Outstanding achievement	80-100	7
Meritorious achievement	70-79	6
Substantial achievement	60-69	5
Adequate achievement	50-59	4
Moderate achievement	40-49	3
Elementary achievement	30-39	2
Not achieved	0-29	1



Assessment Memo: Nutrition

1. Find the hidden words using the clues provided.

B	U	R	P	L	T
S	B	R	E	A	D
B	A	I	A	B	S
O	C	S	N	E	A
P	T	K	U	L	L
T	E	M	T	S	T
F	R	I	D	G	E
I	I	L	U	O	V
S	A	K	R	F	W
H	A	N	D	S	Z
C	A	N	O	L	A

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2. Choose the brown or whole-wheat version of this carbohydrate food for a delicious sandwich.
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(10 marks)



Assessment Memo: Nutrition

2. Using words from the word bank, fill in the missing words below.

Word Bank:

Fridge

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Additives

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2. Keep cold food cold and hot food hot.
3. Milk, yoghurt and cheese should be stored in the fridge.
4. The recommended serving size is the amount of food the manufacturer recommends you at eat one time.
5. Food additives are added to some processed foods.

(5 marks)

3. Name 2 reasons why it is important to read food labels.

Answers: Refer to Nutrition, Grade 6, Lesson Plan 2.

(2 marks)

4. Name 3 types of food additives.

1. Colourants
2. Flavourants
3. Preservatives

(3 marks)

GOOD LUCK!

