Grade 8
List of warm up and cool down exercises
Lesson 1
Worksheet for lesson 1
Lesson 2
Worksheet for lesson 2
Lesson 3
Worksheet for lesson 3
Lesson 4
Worksheet for lesson 4
Lesson 5
Worksheet for lesson 5

Grade 9
List of warm up and cool down exercises
Lesson 1
Worksheet for lesson 1
Lesson 2
Worksheet for lesson 2
Lesson 3
Worksheet for lesson 3
Lesson 4
Worksheet for lesson 4
Lesson 5
Worksheet for lesson 5
Warm up exercises

1. Warm up exercise one (5 minutes)

Mini basketball

- Divide learners into four teams and have two games taking place at the same time
- Have two baskets/hoops on either end of the court (you can divide a netball or volleyball court in half)
- The aim is for each team to score as many hoops as possible
- Players must pass the ball to members of their team and aim to shoot the ball into the hoop as many times as possible. The opposing team will try to intercept the ball and try to score a point for their side in the same hoop.

Stretches:

<table>
<thead>
<tr>
<th>Quadriceps</th>
<th>Calf</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hamstrings</td>
<td>Chest</td>
</tr>
</tbody>
</table>

The learners must hold each stretch for 20 seconds and repeat twice on both sides

2. Warm up exercise two (5 minutes)

Have the learners jog or walk around your learning area – the quad, soccer field etc.

Each time you blow the whistle, they must change direction.

Select one learner to lead the class through three stretches similar to warm up exercise one.
Cool down exercises

1. Cool down exercise one (3 minutes)

Stretches:

- Quadriceps
- Calf
- Hamstrings
- Chest

The learners must hold each stretch for 20 seconds and repeat them twice on both sides.

2. Cool down exercise two (5 minutes)

Get the learners to help pack up the equipment.

Instruct the learners to do following stretches:

- Hamstrings (seated)
- Triceps
- Chest stretch

The learners must hold each stretch for 20 seconds and repeat them twice on both sides.
Lesson one: Test your fitness (40 minutes)

1. Outcomes

By the end of lesson one the learners should be able to:

- know and explain the various components of fitness and how each can be assessed
- discuss the different fitness requirements of various sports
- discuss how fitness can influence health and wellbeing.

2. Teacher’s corner

Each of the outcomes is discussed in detail in the teacher’s information guide. However, you need to encourage the learners to do their own research. Feedback on the tasks and worksheets is crucial at a grade 8 level. However, we have not allocated specific time for to do this in these lesson plans. You should, therefore, try to have an extra lesson for feedback and planning the mass participation task activity.

The main activity in lesson one is to conduct a fitness test. Emphasise that there is no passing or failing or being better than their classmates. The assessment is about knowing their current fitness level. Repeat this lesson in 12 weeks’ time so the learners can determine whether their fitness levels have improved.

Measuring heart rate

To measure your heart rate or to determine how many beats per minute your heart is doing, you need to find your pulse. Your pulse is the throbbing of your arteries as the blood is pumped from the heart to the various parts of the body.

Finding your pulse:

- Turn your right hand so that your palm is facing upwards
- Place two fingers (left hand) on the thumb side of your wrist, on the inside of your ‘wrist bone’
- Do not press too hard. Each time you feel a little bump, it’s your pulse and you can count that as one heart beat.

3. Activities

For lesson one you’ll need the following equipment:

- Large, flat area
- Whistle
- Two basketballs
- Four hula hoops
- Stop-watch
- Pen and record sheet
- Marked out area: have two long lines, preferably 20m apart or you can use a marked area like a soccer field, netball or volley ball court
- Class list
- Worksheets.
Activity one: Warm up (5 minutes)
Choose a warm up exercise from the list of warm up and cool down exercises.

Activity two: 12-minute walk/run (25 minutes – two groups)
Divide the class into four groups; two group As and two group Bs. Introduce the worksheet for lesson one. Inform the learners that they can walk or run or do a combination of both for 12 minutes. Advise them to pace themselves and try to keep a steady pace for the 12 minutes.

- Group A will walk or run first while group B counts the number of laps. You will have two group As walking or running at a time and two group Bs counting laps.
- Allocate each learner in group B a partner in group A
- The aim is to cover as much distance as possible in 12 minutes. Therefore, it is important to know the distance of the course – perimeter of a soccer field, rugby field, netball or basketball court.
- The counter in group B must count his or her partner’s laps and record this on the sheet provided.

After 12 minutes, blow the whistle and yell “stop”. The learners must stop exactly where they are and the group B learner must record the total distance covered (including the amount of the last lap completed).
They will measure their heart rate for 10 seconds. You will need to blow a whistle when they need to start and stop counting the heart beats. Let the learners know why you are blowing the whistle.
Record the total number of laps (including the amount of the last lap) completed on the class list.
Swap learners so that group B can walk/run and group A can count laps.

Tips for activity two
- You can choose to end this lesson at this point, depending on the amount of time available. The rest of the tests can be completed in a separate lesson. Follow the same format for that lesson, using the same warm up and cool down exercises. After the warm up, do the sit-ups, push-ups and flexibility tests.
- It is important to mark out the distance for the 12-minute test before the lesson. Place markers every 10m so that when the learner stops after 12 minutes, you know how much distance the learner has covered.

Activity three: Sit-ups and push-ups (5 to 8 minutes)
Divide the class into pairs and instruct them to do sit-ups and push-ups.

Sit-ups
- Have the learners lie on their backs with their knees bent and hands behind their ears
- Then they need to move up so that the elbows touch the knees – this counts as one sit-up
- They need to keep their necks straight as they move up, rather than curling them in towards their chests
- Partner A will count the number of sit-ups that partner B can complete in one minute
- Let the partners swap roles.
Push-ups

- Get the learners into the push-up position. They must hold themselves up facing the ground, with their arms straight, but elbows not locked and their hands shoulder-width apart. Their torsos should be in the air.
- Their legs should be straight (girls can have their knees bent and resting on the ground, with their feet crossed over each other).
- Partner A will place his or her fist midway between partner B’s hands on the ground
- Partner B will bend his or her arms until the chin is touching his or her partner’s fist and move back up to the starting position.
  This counts as one push-up.
- Partner B will count the number of push-ups completed in one minute
- Let the partners swap roles.

Tip for activity three
Tell the learners when the minute of testing begins and ends. You can give them a breakdown as time is running – 30 seconds, 15 seconds, 10, 9, 8, 7 etc…

Activity four: Improve your flexibility
Get the learners to do certain stretches that test their flexibility.

- **Touching their toes:**
  - Seated on the ground, the learners must stretch out their legs in front of them, and put their feet together, toes facing up
  - They must bend down slowly, reach forward with their arms and try to touch their toes with their fingertips
  - When feeling a slight pull in the back of the legs (hamstrings), the learners should try to hold the position for 20 seconds, but must not bounce when they are bent over.

- **Hip flexor stretch**

Activity six: Cool down (3 minutes)
Choose a cool down exercise from the list of warm up and cool down exercises.

4. Wrap up (2 minutes)
Ensure that all the fitness tests results have been recorded.
Task one: How much air can I breathe?

Record all your fitness test results in the table below.

Fitness test results:

<table>
<thead>
<tr>
<th>Test</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>12 Minute walk/run: Number of laps completed + Distance last lap</td>
<td></td>
</tr>
<tr>
<td>12 Minute walk/run: Pulse (10 seconds X 6)</td>
<td></td>
</tr>
<tr>
<td>Number of sit-ups:</td>
<td></td>
</tr>
<tr>
<td>Number of push-ups:</td>
<td></td>
</tr>
<tr>
<td>Sit and reach count:</td>
<td></td>
</tr>
</tbody>
</table>
Lesson two: Obstacle course (40 minutes)

1. Outcomes
By the end of lesson two the learners should be able to:
- design and teach one adventure game
- plan and implement a grade-based adventure tournament.

2. Teacher’s corner
The main focus of lesson two is on playing adventure games safely. The learners will also have an opportunity to design their own game and to teach it to their class mates. The worksheet will require the learners to work in groups as the main outcome is to plan and implement an adventure Olympics for all grade 8s at the school.

If you find that this lesson plan is too long, plan activity three in a separate lesson. However, please ensure that you include a warm up and cool down exercise in the additional lesson.

Tip for lesson two
The first half of the lesson involves physical activity, while most of the second half is written work. Ensure that there are no groups standing doing nothing during the obstacle course. If they are waiting their turn, introduce another game while they wait. It doesn’t have to be an adventure game – they can play basketball or mini soccer.

3. Activities
For lesson two you’ll need the following equipment:
- Large, flat surface area (the lesson can be indoors or outdoors)
- Equipment for obstacle course, for example, benches, rope, nets, vaulting table and other gymnastic equipment such as larger mats, tyres and hoops
- Rope or string to tie learners together for the obstacle course.

Activity one: Warm up (5 minutes)
Choose a warm up exercise from the list of warm up and cool down exercises.

Activity two: Obstacle course (10 minutes)
Plan an obstacle course on a large flat area. The obstacles in your obstacle course depend mainly on the equipment you have available at your school.

Suggestions for obstacles:
- Long pieces of wood or benches for learners to crawl over and under
- A big net suspended a few centimetres off the ground for learners to crawl under
- Tyres placed in a zigzag formation for learners to hop from one to the other or over
- A high wall or similar structure for learners to climb over
- A rope swing to swing over water or a mat
- A gymnastic vaulting table for the learners to jump over.

Divide learners into teams of about six.
- Round one: Have each team member complete the obstacle course. The aim is to encourage team work and to get the stronger ones to help the weaker team members.
- Round two: Tie the team members together. This time they have to complete the circuit as a unit.
You can determine the winners in a number of ways. For example:

- See which team can complete the circuit in the fastest time
- See who gets the dirtiest
- See which team is able to complete the circuit in the most unique way, for example, instead of walking they hop and sing.

Inform the learners of the method you will use to judge the winner before the activity starts. You can have more than one team on the course at one time, but they have to start a few seconds apart.

**Tip for activity two**

If you have access to a children’s play park, you can use the existing equipment for the circuit. This will save you the time needed to set up and clear the circuit before and after each lesson!

**Activity three: My game plan (15 to 20 minutes)**

Keep the learners in their groups of six and instruct each group to design their own adventure game. Emphasise the importance of safety in the game.

- This activity will be easier to do if you have information on current adventure sports to discuss with the learners
- They need to draw up a list of rules, illustrate the playing area and provide guidelines for scoring.

Depending on the time available, get one or two of the groups to explain their game to the rest of the class. Alternatively, this could be done in separate lesson period.

Pair the groups up. Each group must explain their game to their partner group.

**Activity four: Cool down (3 minutes)**

Choose a cool down exercise from the list of warm up and cool down exercises.

**4. Wrap up (5 minutes)**

Introduce the learners to the worksheet for lesson two. It involves a group activity and they should stay in the same six-person group.

Remind them that they need to consider safety when developing their game.
Worksheet: Grade eight lesson two

Task one: Design an adventure game
Stay in your same group from the lesson and try to improve the game you designed in class.

Task two: Design an adventure tournament
You will now plan an adventure tournament for all the grade eights at your school.
Consider some of the following aspects in your planning:
- Advertising
- Entry and registration
- Safety precautions
- Emergency medical personnel
- Space required
- Permission required (school, traffic authority etc.)
- Prizes
- The game should be suitable for all grade eights, even if they are not very athletic
- The length of your game should not exceed 10 to 15 minutes
- Will your tournament take place during school time or will it be over the weekend? How will this influence your planning?

Task three: Design an adventure day
Work together with the rest of the class to bring all your ideas together with the other groups.
Work with your teacher to make the adventure day a reality.
Lesson three: Strategies for a healthy lifestyle
This lesson can be run over two to three weeks

1. Outcomes

By the end of lesson three the learners should be able to:
- list the elements of a healthy lifestyle
- explain how much physical activity is required to support good health
- list the Food-based Dietary Guidelines for South Africans.

2. Teacher’s corner

Participating in developmentally appropriate sports and physical activities can begin a learner’s journey towards maintaining a physically active and healthy lifestyle. This journey can be continued into adulthood. Although a learner might not be interested in all sports or physical activities, if he or she is given a variety of appropriate choices and adults support him or her, it’s likely the learner will be interested in at least one physical activity or sport.

Learners who are less physically active in early childhood tend to remain less physically active than their peers as they grow up. We recommend that school-aged learners should do at least 60 minutes of age-appropriate physical activity on all or most days of the week.

Important points about physical activity
- Physical activity is any time that the body is moving and is a vital component for good health
- Lifestyle physical activity includes activities such as walking or cycling to school. For younger learners, this would include normal active play.
- Learners should be involved in 15 minutes or more of moderate to vigorous activity every day (when their heart is beating a lot faster than normal). These activities include running, active games and very active play.

The Food-based Dietary Guidelines for South Africa
- Enjoy a variety of foods
- Be active
- Make starchy foods the basis of most meals
- Eat plenty of vegetables and fruits every day
- Eat dry beans, peas, lentils and soy regularly
- Chicken, fish, milk or eggs can be eaten daily
- Eat fats sparingly
- Use salt sparingly
- Drink lots of clean, safe water
- If you drink alcohol, drink sensibly (although learners in grade 8 should not be drinking any alcohol, it is one of the guidelines and is worth mentioning at this stage)
- Have food and drinks containing sugar sparingly and not between meals.

Activity one of lesson three should link with the physical activity exercises of lessons one and two.
3. Activities

Read through background information in the teacher’s information guide, including the Food-based Dietary Guidelines before the lesson.

Tips for activity one

• Learners need to be aware of the importance of a healthy diet and what constitutes healthy eating and drinking. Hold a class discussion to revise the main points.
• Allow time over the next two weeks for the learners to complete their tasks
• During week one, the learners will keep a reflective diary of exercise, food and drink consumption
• During week two, learners will implement their personal goals and attempts at improving their lifestyles.

Activity part one: Introduction (30 to 40 minutes)

Begin the activity with a discussion session.

• Revise the Food-based Dietary Guidelines (FBDGs) issued by the Department of Health
• Reflect on the importance of physical activity for a balanced lifestyle
• Introduce the concept of a holistic approach to maintaining a balanced lifestyle. This refers to doing enough physical activity, eating a balanced diet and avoiding harmful activities. You must do all of these things to lead a balanced lifestyle.

Ask learners these simple questions to understand their lifestyle habits better:

• When was the last time you played outside, went to a sports-practice, or walked to school?
• When was the last time during play that your heart was beating quickly or you were breathing hard?
• What activities or sports do you like? How often do you do them?
• Do you like to be physically active with your friends and family?
• What physical activities do you enjoy doing with your friends and family?
• What do you eat and drink at school?
• Do you follow a healthy, nutritious diet?
• Do you have breakfast each morning?

Main part of the activity (30 to 40 minutes)

List the strategies that learners should try and include when planning a balanced, healthy lifestyle:

• Reduce the time you spent watching TV or playing TV and computer games
• Eat breakfast every day
• Eat fresh vegetables and fruit every day
• Make starchy foods the basis of most meals
• Eat chicken, fish, or eggs and drink milk every day
• Reduce sugar in your diet
• Reduce salt in your diet
• Drink enough water every day
• Participate in one hour of physical activity per day.
Tell the learners to complete the first part of the worksheet during the first week after you have this lesson.

- Be clear that they will not be judged by others during this activity and that it is an opportunity for them to develop and maintain goals and strategies they have set for themselves.
- Emphasise that each person’s goals and strategies to achieve their goals will be different, as we are all different.
- In the next lesson, discuss their progress on achieving their goals. If they haven’t reached their goals, it is okay. They can make adjustments and reassess their goals.

**Activity part three: Conclusion**

At the end of the two weeks, discuss:

- which benefits they gained from it
- which adjustments needed to be made and why.

Make sure each learner participates in the discussion and that no-one feels as if they are being judged. Remember to emphasise the positive aspects of their attempts and achievements.

**4. Wrap up (5 to 10 minutes)**

Remind the learners why they made the lifestyle changes and of the health benefits they will receive.

Congratulate all the learners for their efforts and encourage them to keep trying to improve their lifestyles.
Task one: Lead a healthier lifestyle

Consider these strategies for a healthy lifestyle:

- Reduce the time you spend watching TV or playing TV and computer games
- Eat breakfast
- Eat fresh fruit and vegetables every day
- Make starchy foods the basis of most meals
- Eat chicken, fish or eggs and drink milk every day
- Reduce sugar in your diet
- Reduce salt in your diet
- Drink sufficient water every day
- Participate in one hour of physical activity a day.

For you to do

- Complete the healthy eating diary for a week
- Plan ways to improve and develop a healthier and more balanced lifestyle. Write these strategies down in your diary and try to complete them over a week.
## Healthy eating diary

<table>
<thead>
<tr>
<th>Day</th>
<th>Everything I ate and drank</th>
<th>All the exercise I did</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tuesday</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wednesday</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thursday</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Friday</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

My personal goals and strategies for improving my lifestyle:

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
Lesson four: Design a wellness brochure (two 45 minutes periods)

1. Outcomes

By the end of lesson four the learners should be able to:

- List the elements of a healthy lifestyle
- List five benefits of physical activity
- List the elements of a healthy diet
- List the elements of a physical activity programme.

2. Teacher’s corner

Lesson four requires the learners to design a wellness brochure. Note that the times given for each part of the activity are only a guide and that you should adjust the length of the activities as you see fit. This section lists information that can be included in a wellness brochure.

Healthy choices: Physical activity

People of all ages get enormous benefits from regular physical activity and it’s never too late to get active! In fact, research has shown that those who are least active have the greatest initial health and fitness benefits when beginning a regular physical activity programme.

In addition to playing a role in preventing and managing certain diseases, regular physical activity has the following benefits:

- Feelings of wellbeing and self belief improve as levels of activity increase. You can even reduce your stress levels by exercising regularly.
- Physical activity can help decrease feelings of fatigue and leave you feeling more energetic and full of vigour.
- By including physical activity into your daily routine, your chances of achieving a healthy weight are increased as you will burn calories and build up muscle mass. Regular exercise may also result in improved eating habits.
- The quality of your sleep will improve as you become physically active. Studies have shown that people who are physically active fall asleep quicker and experience a deeper sleep than those who are not.
- Parents are in a unique position to encourage their children to include physical activity in their lifestyles. Physically active children are much more likely to become active adults and, therefore, healthier adults. Include a family walk along the beach or in the forest as part of your weekend routine.

Getting started

No matter how inactive you are at the moment, you will soon reap the benefits of regular physical activity, so get started now!

What is a moderate intensity activity?

- Brisk walking
- Mowing the lawn
- Washing windows or floors
- Dancing
- Recreational swimming
- Cycling.

What is a vigorous intensity activity?

Vigorous intensity activities cause you to feel more breathless and your heart to beat faster than moderate intensity activities as you are pushing your body harder.

- Recreational swimming or cycling can be classified as moderate intensity exercise, but if you increase the intensity or speed, the activity can be classified as vigorous.
- Brisk walking is a moderate intensity activity, whereas running is vigorous activity.
Suggestions for increasing physical activity

If you are inactive:
• Include a short session of physical activity (10 minutes walking) in your daily routine. Gradually increase the duration of the session until you are able to exercise for 30 minutes or more. The 30 minutes need not be done in one go.

If you are active, but do less than what is recommended:
• Include 30 minutes of moderate intensity physical activity on most days of the week. You can do three 10-minute sessions if 30 minutes seems too long, especially on days where you are very busy.
• Alternatively, increase the intensity of your exercise from moderate to vigorous and aim for three 20-minute sessions per week.
• Try to do a little moderate intensity exercise on the other days.

If you are currently participating in 30 minutes of moderate physical activity on five or more days of the week:
• Consider increasing the length and/or intensity of some of your sessions as this could result in additional health and fitness benefits.

If you are currently participating in vigorous activities three times per week for at least 20 minutes per session:
• Well done! Keep up your physical activity programme.
• Make sure you also do some moderate intensity exercise on other days of the week.

Adapted from Centers for Disease Control and US Surgeon General’s recommendations.

Ideas to increase the number of steps taken per day:
• Use the stairs instead of the lift or elevator
• Dance to your favourite song
• Walk or jog on the spot while watching TV
• Go for a brisk walk around the shopping mall before you start your shopping
• Take a brisk walk during break
• Go for a short walk in your neighbourhood with your family before or after supper
• Take the dog for a walk
• Play a game of soccer, netball or basketball.

Healthy choices: Maintaining a healthy weight

The South African Food-based Dietary Guidelines are a set of dietary goals that have been specifically developed to encourage and promote healthy eating habits. These simple, action-oriented guidelines are especially important if you are at risk of being overweight or obese or developing type 2 diabetes, high blood pressure or high cholesterol.

1. Enjoy a variety of foods
2. Be active
3. Make starchy foods the basis of most meals
4. Eat plenty of vegetables and fruits every day
5. Eat dry beans, peas, lentils and soy regularly
6. Chicken, fish, milk or eggs could be eaten daily
7. Eat fats sparingly
8. Use salt sparingly
9. Drink lots of clean, safe water
10. If you drink alcohol, drink sensibly
11. Use foods and drinks containing sugar sparingly and not between meals.
The wellness balance scale

The wellness balance scale reflects the healthy balance that is needed between nutritional intake and output. We need to balance what we eat (nutritional intake and calories) with how much physical activity (output and the number of calories we burn) we do to maintain a healthy balance.

3. Activities

You need to do some preparation before the lesson:

- Collect samples of wellness or health brochures to show learners
- Many food shops and pharmacies have free healthy-eating and wellness brochures available at the information counter
- Physical activity brochures are often available from the customer care desk at many gyms
- Even if the brochure is not linked to healthy living (for example a travel brochure), it can be used to show layout and features.

For lesson one you’ll need the following equipment:

- Extracts from the teacher’s information guide
- A copy for each learner of the worksheet for lesson four
- Paper
- Coloured pens or pencils
- Glue
- Magazines
- Staplers for the brochure.

Activity 1: Design a wellness brochure

The learners can work in pairs to research and prepare their brochures. You should make information from both the fitness and nutrition activities available for this lesson.

Activity part one: Introduction (45 minutes)

Hold a class discussion in which you revise the main points that have been covered in the first four lessons regarding healthy eating and physical activity habits. During the discussion, summarise the main points on transparency slides or flip-charts, which can be displayed for the learners’ later reference.
Main part of activity (35 minutes)
Discuss the brochures and information booklets with the learners. Use the samples you have collected to show the learners that a brochure should:

• be colourful
• be eye-catching
• have interesting visual material
• contain interesting, relevant information
• be easy to read, and
• not contain too much information.

Explain that they should work in pairs to prepare a wellness brochure titled: “How to develop a healthy lifestyle”.

The wellness booklet should include the following:

• A title: “How to develop a healthy lifestyle”
• A cover page that is colourful and gives the reader an idea about what the booklet is about
• An introduction telling the reader why they have developed this booklet and the importance it has for the reader
• A contents page which lists the sections the brochure covers. This sections must include: physical activity, healthy eating choices, how to develop a healthy lifestyle and how this needs to be in balance
• Concise, relevant information that is illustrated where necessary
• Be no longer than four A4 pages (written on both sides). These pages may be folded to create a brochure format.
• Provide clear information regarding timelines and include the submission date.

Activity part three: Conclusion (5 minutes)
Encourage the learners to set personal goals regarding their wellness and allow time in class over the period of the year to discuss their healthy lifestyle choices.

4. Wrap up (5 minutes)
Tell the learners that if they understand the components of a healthy lifestyle well enough to create a brochure, they definitely should be able to implement healthy lifestyle choices. Encourage them to make leading a healthy lifestyle a family affair.
Task one: Design a wellness brochure

- Work in pairs and design a wellness brochure
- The aim of the brochure is for you to sell a ‘healthy lifestyle’ to your friends, family or other schools in South Africa, using all the knowledge you have gained from previous activities.

Your brochure should meet these requirements:

- Have a title
- Have a cover page that is colourful and gives the reader an idea about what the booklet is about
- Have an introduction telling the readers why you have developed this booklet and the importance it has for the reader
- Have a contents page which includes: physical activity, healthy eating choices, how to develop a healthy lifestyle and how a healthy lifestyle is a balance
- Have concise, relevant information that is illustrated where necessary
- Be no longer than four A4 pages (both sides). These pages may be folded to create a brochure format.

Use the information from previous activities, as well as the information that was presented in summary form during the class discussion.

For further information you could go to the following websites:

www.discovery.co.za
www.aiaacademy.org/healthy_lifestyle.php
www.healthykids.nsw.gov.au
http://schoolclub.taps-nodes.co.za
Lesson five: Portion distortion (40 minutes)

1. Outcomes

By the end of the lesson five learners should be able to:

- compare how portions of food have changed over time
- explain and discuss how to maintain a healthy weight
- explain the importance of physical activity as part of a balanced lifestyle.

2. Teacher’s corner

The aim lesson five is to integrate the nutrition and physical activity knowledge gained in the previous four lessons. Therefore the theoretical base for this lesson is the same as for the first four lessons.

What is a calorie?

A calorie is the standard unit for measuring energy in nutrition. We get calories from eating food and certain foods contain more calories than others. It is important to balance the amount of calories we take in with those we burn – we gain weight when we do not burn as many calories as we take in. We burn calories to maintain our body’s functions and through physical activity. We therefore need to what (and how much) we eat with how much activity we do.

Why physical activity levels have changed in the last 20 years

There are many reasons why children’s physical activity levels have decreased in 20 years:

- Many children walked to school in the past but now get lifts in cars or use public transport
- Chores such as mowing the lawn have become easier with the development of electronic equipment
- Children spend more time watching TV and playing computer games than in the past when more children played outside for entertainment
- Opportunities for physical activity have declined at schools.

3. Activities

For lesson five you’ll need a copy of the worksheet for each learner.

Activity one (20 minutes)

Activity one starts with a discussion session.

- Discuss what a portion of food is and why portion size is important
- Make sure the learners understand the concept of ‘calories’
- Let the learners work in pairs.

Once the learners understand these concepts, you can move onto the practical part of activity one.

- Hand out the worksheet for lesson five and have the learners complete it.

Activity two: Healthy lifestyle history (15 minutes)

Activity two is a discussion session on the history of lifestyles. Discuss the following questions:

- Why do you think our food portions have become bigger?
- How does eating larger portions affect our health?
- Why is physical activity so important for our health?
- Do you think people today are more or less physically active than people were 20 years ago? Why do you think so? Refer to the teacher’s information guide

4. Wrap up (5 minutes)

Go over the key issues on physical activity and nutrition that have been covered in the grade 8 lesson plans.
Worksheet: Grade eight lesson five

Task one: The five food groups quiz

Work with a partner.

Take turns to answer.

Let your partner check your answers.

1. A bagel 20 years ago had 140 calories. Today’s a bagel has 350 calories. This is 210 more calories than a bagel 20 years ago. How long will you have to rake leaves in order to burn those extra calories?
   a. 50 minutes 
   b. 90 minutes (1 hour 30 minutes) 
   c. 120 minutes (2 hours)

2. A cheeseburger 20 years ago had 333 calories. Today’s fast food cheeseburger has 590 calories. This is 257 more calories than a portion 20 years ago. Now guess how long you will have to lift weights in order to burn those extra calories?
   a. 60 minutes (1 hour) 
   b. 90 minutes (1 hour 30 minutes) 
   c. 30 minutes

3. A portion of spaghetti and meatballs 20 years ago had 500 calories. Today’s portion of spaghetti and meatballs has 1 025 calories. This includes two cups of pasta with sauce and three large meatballs. This is 525 more calories than a portion 20 years ago. How long will you need to do housework in order to burn those extra calories?
   a. 85 minutes (1 hour 25 minutes) 
   b. 120 minutes (2 hours) 
   c. 155 minutes (2 hours 35 minutes)

4. A fizzy drink 20 years ago had 85 calories. Now it has 250 calories. This is 165 more calories than 20 years ago. Now guess how long you will have to work in a garden in order to burn those extra calories?
   a. 90 minutes (1 hour 30 minutes) 
   b. 35 minutes 
   c. 50 minutes

5. A packet of fried chips 20 years ago had 210 calories. Today’s portion of fried chips has 610 calories. This is 400 more calories than a portion 20 years ago. Guess how long you will have to walk leisurely in order to burn these extra calories?
   a. 180 minutes (3 hours) 
   b. 140 minutes (2 hours 20 minutes) 
   c. 70 minutes (1 hour 10 minutes)
6. A muffin had 210 calories 20 years ago. Today a muffin has 500 calories. That is 290 calories more. How long will you have to vacuum to burn those extra calories.
   a. 120 minutes (2 hours)
   b. 90 minutes (1 hour 30 minutes)
   c. 35 minutes

7. 20 years ago two pieces of pizza had 500 calories. Today, two large pieces of pizzas are 850 calories. How long will you have to play golf in order to burn off those extra 350 calories?
   a. 60 minutes (1 hour)
   b. 50 minutes
   c. 150 minutes (2 hours 30 minutes)

8. 20 years ago a chocolate chip biscuit had 55 calories. Today a chocolate chip biscuit has 275 calories. How long will you have to wash the car to burn off those extra 220 calories?
   a. 30 minutes
   b. 75 minutes (1 hour 15 minutes)
   c. 55 minutes
Warm up exercises

1. Warm up exercise one (10 minutes)

You will need a CD player and music for warm up exercise one.

Tell the learners to dance to the music, preferably using a dance or aerobic sequence you have worked out before the lesson. You can ask one of the learners to lead this part of the lesson but must allow the learner a few days to prepare. Ensure that the music has an appropriate beat (not too fast).

The boys may not be keen to do aerobics so you can add some other exercises that may appeal to them, such as an easy jog.

2. Warm up exercise two (5 minutes)

Divide the learners into four groups so you can have four games of tag running at the same time.

In each group, one learner is ‘it’ and has to chase and touch another learner who becomes ‘it’, once touched.

The challenge is that learners can only move by hopping on one leg.

Instruct the learners to do the following stretches:

- Triceps
- Calf
- Shoulder
- Quadriceps

The learners must hold each stretch for 20 seconds and repeat them twice on both sides.
Cool down exercises

1. Cool down exercise one (3 to 5 minutes)

Instruct the learners to perform the following stretches:

- Quadriceps
- Hamstrings
- Chest
- Triceps

The learners must hold each stretch for 20 seconds and repeat them twice on both sides.

2. Cool down exercise two (5 minutes)

Get the learners to help pack up the equipment.

Instruct the learners to do the following stretches:

- Hamstrings
- Hip flexor stretch
- Calf

The learners must hold each stretch for 20 seconds and repeat them twice on both sides.
Lesson one: Wombat ball (40 minutes)

1. Outcomes
By the end of lesson one the learners should be able to:
- discuss how physical activity promotes health
- discuss the role of physical activity in the prevention and treatment of diseases of lifestyle
- know the components of the South African Youth Fitness Charter.

2. Teacher’s corner
We have included a copy of the Youth Fitness Charter in this lesson plan. Use the Charter to help you start this lesson by saying that access to physical activity is a right and not a privilege.
Encourage debate in the class about issues that arise within the Charter. For example, discuss what protection means. It includes protecting children from being forced to take performance enhancing drugs by their coaches to make them stronger or reach a certain weight, or to lose weight, or to compete in an inappropriate age group.

A. The Youth Fitness Charter

Preamble
The children and youth of South Africa are our future. This Charter aims to contribute to nation building, to enhance the general wellbeing and to improve the quality of life of all young South Africans by ensuring the following:
- All South African children and youth have the right to be physically active
- Opportunities and facilities to participate in physical activity, sport and play should be equally accessible and available to all
- Children and youth are active participants in promoting participation in physical activity, sport and play
- The diversity of South African children and youth is recognised and embraced
- The successful promotion of this message is achieved through partnerships among parents, sporting organisations, local, provincial and national government, non-government and non-profit organisations, higher education institutions, clubs, schools, faith-based organisations, the youth sector, the private sector and other key role players.

Aligned with the South African Constitution, this Charter has been developed for all South Africans and should be adopted by all South Africans to improve the quality of life for all citizens and free the potential of each person. Physical activity, sport and play are meaningful channels through which South Africa can embrace its people and achieve this goal.

Article 1: Fundamentals – All South African children and youth have a fundamental right to participate in physical activity, sport and play.

Article 2: Diversity and nation building – Physical activity, sport and play can assist in nation building and in overcoming barriers to integration and the de-racialisation of our society.

Article 3: Wellbeing – Physical activity, sport and play form an essential element of integrated development and growth, leading to lifelong positive lifestyles.

Article 4: Health – All children and youth should be encouraged to participate in physical activity, sport and play to improve physical fitness and to prevent chronic diseases of lifestyle through optimal nutritional choices, by developing appropriate knowledge and life skills and engaging in health promoting behaviour.

Article 5: Partnerships – Parents, sporting organisations, local, provincial and national government, non-government and non-profit organisations, higher education institutions, clubs, schools, faith-based organisations, the youth sector, the private sector and other key role players (collectively referred to hereafter as ‘key role players’) should work together to provide opportunities for children and youth to participate safely in physical activity, sport and play.

Article 6: Education and training – The education system should assume responsibility for the provision of appropriate formal movement education programmes, physical activity, sport programmes and play for all children and youth in safe and healthy environments.
Article 7: Facilities and infrastructure – Government, in partnership with the youth sector, the private sector, communities and key role players should provide a sustainable infrastructure that includes safe access, facilities, equipment and, where appropriate, transport for all children and youth.

Article 8: Protection – National Sporting Federations and regulating bodies should provide guidelines for key role players to support the delivery of programmes that have a positive impact on the physical, mental, social, and emotional wellbeing on all children and youth. These guidelines should address the protection of children and youth participating in organised physical activity and sport at all levels, including those performing at an elite level.

Article 9: Media – Recognising the value of communication, all media should strive to become a positive influence on participation of children and youth in physical activity, sport and play.

Article 10: Research – Research should inform the decision-making processes surrounding the provision of facilities, equipment and development of appropriate physical activity, sport and play guidelines and programmes for all children and youth.

B. Three main health risk factors

3 risk factors: tobacco use, poor diet and physical inactivity contribute to the FOUR major chronic diseases – heart disease, type 2 diabetes, lung disease and certain cancers, which are responsible for more than 50% of the deaths in the world.

3 FOUR 50 is a nice way to explain to the learners how health risk factors cause chronic diseases, which lead to 50% of deaths world wide. 3 FOUR 50 is a concept developed by the Oxford Health Alliance. Visit www.oxha.org to find out more.

Increasing South Africans’ levels of physical activity will improve their health and reduce the burden of disease and associated medical costs. You can find additional information on the benefits of physical activity in your teacher’s information guide.

3. Activities

For lesson one you’ll need the following equipment:

- Music system and CDs
- For activity two: Wombat ball: five bases, one wombat (a towel rolled up tightly in a cone shape and taped with masking tape or cellotape – a big towel works very well), one volley ball (or similar ball), one safety cone to mark the batter box or start of the batting line
- A copy of the Youth Fitness Charter.

Activity one: Theory (10 minutes)

Activity one is a discussion session and can take place on the field or in the classroom.

- Discuss the South African Youth Fitness Charter with the learners
- Encourage debate in the class about issues that arise from the Charter
- Discuss the role of physical activity in the prevention and treatment of diseases of lifestyle
- Discuss how different cultural beliefs could influence regular physical activity
- Discuss how the rules of wombat ball differ to baseball and the impact that this could have on how many players participate in the game.

Activity one could be a lesson on its own, especially if you would prefer to have wombat ball as a separate lesson.

Activity two: Warm up (5 minutes)

Choose a warm up exercise from the list of warm up and cool down exercises.
Activity three: Wombat ball (25 minutes)

Spend five minutes explaining the rules if you have not already done so in activity one.

Wombat ball is similar to soft ball but is played with a rolled up towel (wombat as explained above) and a volleyball. Depending on the size of your class, you may want to divide the learners into four groups so that you have two games taking place at the same time.

How to play wombat ball

The rules are similar to soft ball. One team bats while the other fields. The objective of the game is to score more runs than your opponent. A team scores a run when a team member reaches home base via first, second and third base. A runner can run only one base at a time and need not try and reach home base on the first attempt. If a batter decides to stop at a certain base, he or she must keep a foot on the base. That player then becomes a runner when a team-mate comes up to bat.

Each time a batter hits the ball and it is in play (the ball must go in front of the batter, between lines drawn in a V-shape) the batter must run to first base. Two batters cannot be on the same base at the same time. The runner on first base must run to second if the batter hits the ball in play, and has to run to first base.

First base is a safety base. This means there are two parts to the base: one for the batter/runner to run to, and one for the first base fielder to stand on. They must keep to their parts of the base.

Please note the following additional rules.

The batting team

1. How to bat
   - Hold the bat with both hands at the bottom. No choking up!
   - They should not bunt. (They must have a swing at the ball, not merely bunt or block the ball.)
   - When the batter runs to first base, he or she must throw the bat and not run with it. The batter is out if the bat is thrown more than five bat-lengths away from home base.
   - Each batter will have four pitches in which to hit a fair ball, and may get an extra pitch on a fouled fourth pitch (optional). A fair ball is one that is hit in front of the batter, between the V-lines.
   - A batter is out when he or she:
     - has faced four pitched. If the fourth pitch is a foul (not in the strike zone), the batter gets another pitch. A ball is in the strike zone if it is the correct height – between the batter’s knees and arm pits. It cannot be aimed at the batter’s body or be too wide as to be out of the batter’s reach.
     - hits the ball in the air and it is caught without a bounce
     - is run out. A run out occurs when the fielder at the base for which the runner is headed has the ball at the base, and the fielder has one foot on the base. If the fielder does not have a foot on the base, he or she must touch the runner with the ball (while still holding it) to get a run out.
     - throws the bat more than five bat-lengths away from home base.
2. The runner

- There is no sliding for safety reasons
- The runner may not start running before the batter hits the ball
- Runners must touch the base again on all fly balls. This means that if the batter is caught out, the runners can still be run out if they are not on a base.
- The runner is out if he or she gets hit by a ball (that’s been hit by the batter) while off the base or running
- If a fielder throws a ball and it is not collected by a team mate and it goes out of the V, all runners move one base
- Runners must use the safety base to run through first base.

3. The team

- The rest of the team must be behind the safety cone while a player is batting. Place the safety cone behind the batter, and to the left, in a place where the ball is not likely to be hit.
- The fielding team swaps to go and field after three players are out, or once they have scored five runs. A team may score only five runs per innings unless they are behind by more than five runs. In that case, they can score as many runs as needed to go ahead by one run. This keeps the game much more interesting and fun.
- Restrict the game to no more than three innings per team. If you want to play wombat ball over a full lesson, you can have more innings.

The fielding team

- The fielder at first base may not use the batter’s side of the safety base to get an out – the first base fielder must keep to his or her side of the base
- A fielder may not block a runner or stand in the way if that fielder does not have the ball – in this case, the runner has right of way
- A fielder may not throw the ball at a runner to get him or her out
- If you cannot see if a learner should be given out or not, the fielding team must make the call. Encourage them before the game to be honest – both teams will have a chance to field and make calls.

Ensure that you are familiar with the rules of wombat ball before the lesson and that you have tried it with a group of family members, friends or your colleagues!

**Activity four: Cool down (3 to 5 minutes)**

Choose a cool down exercise from the list of warm up and cool down exercises.

**4. Wrap up (5 minutes)**

Tell the learners that lesson one is about improving their coordination skills and that wombat ball and similar games also improve their cardiovascular fitness.
Worksheet: Grade nine lesson one

Task one: Exercise as medicine
Write a short paragraph in the space provided below on the role of physical activity in the prevention and treatment of disease.

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

Task two: Design a container
Exercise has been described as medicine, where taking your daily dose of physical activity is similar to taking a tablet or pill. (Note, you must not stop taking any medication, for example, for diabetes, high blood pressure or any disease if the doctor has prescribed it for you).

The recommended physical activity dose is 30 minutes per day, on at least five days per week for adults.

The recommendation for children is to do 60 minutes of moderate to vigorous intensity activities per day.

Design a box for this amazing medicine ‘physical activity’.

You can make up a name for your medicine.

The box should include information on the dose.

Design the paper insert, which includes precautions and side effects. Be as creative as possible, but try to keep it fairly accurate.
Lesson two: School environment (40 minutes)

1. Outcomes
By the end of lesson two the learners should be able to:
• discuss which environmental factors influence physical activity in their school
• suggest and discuss solutions to improve their school’s ability to make physical activity easy.

2. Teacher’s corner
In this lesson the learners will be moving all over the school to evaluate how the school’s environment promotes physical activity. Environmental factors are discussed briefly in the teacher’s information guide.

Environmental factors that influence physical activity:
• How close facilities (school, shops, places of worship) are to one another
• Street design
• Housing density
• Availability of public transport
• Pedestrian and cycling facilities
• Safety
• Crime
• Injury and motor vehicle accidents
• Numbers of cars in a family
• Neighbourhood design and the availability of green areas
• Owning a pet.

3. Activities
For lesson two you’ll need the following equipment:
• Tape measure or measuring wheel
• Paper and pens for learners to record distance.

Activity one: School environment (25 minutes)
Hand out the worksheet for lesson two and instruct the learners to fill it in as they walk around the school. Divide the learners into groups of four. Ask the learners to walk around the school and evaluate the following:
• The amount of space available for play or physical activity
• The distance from their home class to other locations such as the office, tuck shop, other classes and the car park
• Where the stairs are
• Availability of equipment, changing rooms and showers
• Other environmental factors that impact on physical activity.

Tips for activity one
The school environmental assessment will have learners running to all the corners of the school buildings. Ensure that they are not disruptive to other classes. You may want to have all the learners move to the same area at the same time instead of allowing them to go off on their own or in small groups.

Alternatively, divide the learners into groups of six to eight and ask them to work together as a team. Appoint a team captain who is responsible for the team’s behaviour.
Activity two (10 minutes)

Have the learners return with their findings. Discuss the following issues:

- To what extent their school’s design encourages physical activity
- What the distances they measured mean
- Whether or not it is possible to improve the school’s ability to encourage physical activity through its layout.

4. Wrap up (5 minutes)

Discuss the importance of the school’s environment for physical activity with the learners. Remind them of the effect that cultural factors, including one’s home or school environment, have on physical activity levels.
Worksheet: Grade nine lesson two

Task one: Investigating physical activity

Work in groups of four. Walk around the school and evaluate the following:

- How much space is available for physical activity
- The distance from your home class to important places in the school
- The availability of equipment that promotes physical activity.
Lesson three: Frisbee challenge (40 minutes)

1. Outcomes
By the end of lesson three the learners should be able to:
- understand and explain how variations in the rules of a game can influence the game. In particular, they should be able to discuss how to adapt rules to increase participation.
- understand and evaluate environmental factors that could influence neighbourhood and school-based physical activity.

2. Teacher’s corner
The first half of the lesson will explore a game and how changing the rules can influence it. You can use any physical activity or game, the Frisbee challenge is just an example. You can see the games rule book from Sport Recreation South Africa (SRSA) on www.srsa.gov.za

3. Activities
For lesson two you’ll need the following equipment:
- Large playing area about the size of a soccer field
- Frisbees
- Markers or cones for end lines in the Frisbee challenge.

Activity one: Warm up (5 minutes)
Choose a warm up exercise from the list of warm up and cool down exercises.

Activity two: Frisbee challenge (20 minutes)

The rules
You should spend the first five minutes of this activity explaining the rules. The game is a combination of netball and soccer. The aim of each team is to throw the Frisbee over the goal line. The team members must pass the Frisbee to each other to get to the goal line. The team not in possession of the Frisbee must try to intercept passes to gain possession of the Frisbee.
- Start the game at the centre of the field and allow the learners to choose how to position themselves to get to their goal-line quickest.
- The learners must throw the Frisbee to each other, aiming to get it over the goal-line. The goal line should be a small area, the size of soccer goals.
- Once a person catches the Frisbee, they must stop running and throw it before they are allowed to move again. A learner may not take more than one step while holding the Frisbee, and that step can only be a throwing stride.
- Once the team reaches the goal-line and scores, all the players move to the centre of the field and the other team starts with possession of the Frisbee.
- The opposing team will start play by throwing the Frisbee.

Divide the learners into four groups to have two games running at the same time. Ensure that you have a second referee, if you feel that the teams will not be able to self referee.

For activity part two, the learners need to introduce their own rules to increase the number of learners who can participate in the activity.
Additional rules could include:

- Make the goal-line area smaller by adding a height restriction. (The learners have to throw the Frisbee through a smaller space to score.)
- Each team must complete at least five passes before they’re allowed to score.
- A learner may not have the Frisbee for longer than three seconds before passing it.
- No learner may score more than once. Each score must be made by a different team member.

**Activity part one (10 minutes)**

Divide the soccer field into two, one half per game. Let the teams play against each other, using the original rules described above.

**Activity part two (15 minutes)**

- Stop the game and have each team choose two new rules to introduce to increase participation (5 minutes)
- Play should resume using the new rules (10 minutes).

**Activity three: Cool down (5 minutes)**

Choose a cool down exercise from the list of warm up and cool down exercises.

**4. Wrap up (5 minutes)**

Discuss how a rule change or two influenced the Frisbee game.

Hand out the worksheet for the homework activity and brief the learners. If there is time, the learners can start filling in the worksheet and complete the rest as homework.
Task one: Walkability

Draw a relatively detailed map of your neighbourhood. Include and mark the distance between your house and the following:

- Your best friend’s house
- School
- The nearest shop
- The shopping mall
- The nearest railway station / bus stop / taxi rank
- The nearest restaurant or fast food outlet.

Your map should have your house at the centre, with all the other areas marked so that you have a radius for each location from your house.

Task two: Interview

List these locations (you can add some more if you like) in a table.

Interview the members of your household. Ask them how they travel from their house to each of these locations.

Then ask them what factors might encourage them to walk to these destinations instead of using motorised transport.

- Your best friend’s house
- School
- The nearest shop
- The shopping mall
- The nearest railway station / bus stop / taxi rank
- The nearest restaurant or fast food outlet

<table>
<thead>
<tr>
<th>Location</th>
<th>How your household members travel there</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Lesson four: Why and how we eat (40 minutes)

1. Outcomes

By the end of lesson four the learners should be able to:

• explain the influence of various factors on dietary choices and eating habits
• discuss the influence of ecological, social, economic, cultural and political factors on their choice of diet.

2. Teacher’s corner

Lesson four focuses on the various factors that affect eating habits. We have included background information for discussion below.

There are many factors that determine what a person eats. In addition to personal preferences, there are cultural, social, religious, economic, environmental and even political factors.

**Eating rituals**

People do not eat for survival only. We eat according to learned behaviours regarding etiquette, meal and snack patterns, acceptable foods, food combinations and portion sizes. Etiquette refers to acceptable behaviours. For example, it is acceptable for some cultural groups to lick their fingers while eating, while for other groups this is considered rude.

Etiquette and eating rituals also vary depending on whether the meal is formal, informal or special (such as a meal on a birthday or religious holiday).

**What are eating habits?**

Eating habits refer to why and how people eat, which foods they eat and who they eat with. The ways people obtain, store, use and discard food also form part of their eating habits. Individual, social, cultural, religious, economic, environmental and political factors influence people's eating habits.

The types of food we eat, where we get our food from, how we prepare it and when we eat it are all influenced by culture, social customs, ecological, economic and political factors.

**Culture**

• Not only is food essential for our survival, eating and drinking are part of our cultural identity, a reflection of who we are, and form part of our quality of life. But it is important to note that culture is learned and constantly changes and adapts to its environment.
• Food is much more than nourishment. Food can be symbolic and it can reflect social status.
• Cultural considerations shape our diet, both in terms of what we define as food and how much of it we eat. These considerations may even appear to some as more important than our biological needs.
• A cultural group provides guidelines regarding acceptable foods, food combinations, eating patterns and eating behaviours. Complying with these guidelines creates a sense of identity and belonging for the individual.
• Within large cultural groups, subgroups exist that may practice variations of the group’s eating behaviours, though they are still considered part of the larger group. For example, a hamburger, French fries and a soda are considered a typical American meal. Vegetarians in the United States, however, eat “veggie-burgers”. In the United States these are appropriate cultural substitutions, but a burger made from horsemeat would be unacceptable.

**Ecological factors**

• While many of the types of food we eat have a long history, the methods of growing and preserving food have changed. As farming methods changed, so have the ways people managed the land.
• In recent decades, the development of agriculture led to ecological, economic, health-related, social and cultural problems. For example, intensive production of food not only involves higher profit (producing food to make profit has led to a decrease in its quality in certain cases), but also ecological damage and food scandals.
Agricultural factors

- Over 10,000 years ago people began to shift from hunting and gathering to intentionally designing and managing the landscape to serve our food needs (agriculture).
- We began to control land’s characteristics and develop technology to grow crops and raise animals to suit our tastes.

Lifestyle factors and social factors

- In a culture where plenty of food is available, people sometimes eat too much or eat foods that are not healthy.
- It is increasingly common to eat out at restaurants or to buy convenience food.
- Members of a social group depend on each other, share a common culture and influence each other’s behaviours and values.
- A person’s membership in a particular peer, work or community group affects that person’s food behaviours. For example, a young person at a basketball game may eat certain foods when accompanied by friends, and other foods when accompanied by his or her teacher.

Economic factors

- Money, values and consumer skills affect the food a person buys.
- Cost is a complex combination of a food’s availability, status and demand.
- The price of a food does not indicate its nutritional value.

Political factors

- Food legislation and trade agreements affect what is available within and across countries.
- Food legislation and trade agreements also affect food prices.
- Food labelling legislation plays a large role in determining what consumers know about the food they buy.

Individual factors

- Every person has their own food likes and dislikes.
- These preferences develop over time and are influenced by personal experiences such as being encouraged to eat a certain food, exposure to a food, family customs and rituals, advertising and personal values.
- For example, one person may not like fish even though the rest of the family really enjoys it.

Religious factors

- Religion can affect a person’s food choices and behaviours.
- In some religions certain foods are not allowed to be eaten. For example, pork is not eaten by people from the Jewish or Muslim religions.

Obtaining, storing and using food

- People obtain, store and use food in different ways.
- People may grow, fish or hunt some of their food, or they may buy it from supermarkets or specialty stores.
- If there is limited access to food, people might store small amounts of food and get most of what they eat on a day-to-day basis.
- In many homes, there is plenty of space and access to food. Frequently, people buy food in bulk and store it in freezers, refrigerators and pantries.

Eating habits are the result of both external factors, such as politics, and internal factors, such as values. Sensitivity and awareness of these factors is vital when telling learners to make changes to their eating habits.

In fact, the World Health Organization (WHO) has emphasised the importance of considering social, cultural, political and structural influences for effective prevention and management of obesity.
Activity one: Introduction (15 minutes)

Introduce the different factors that affect the dietary habits that are listed above. Make sure the learners understand these factors well enough to be able to do activity two.

Have a discussion session where the learners can give examples of how these factors affect dietary habits. Write the good suggestions on the board.

Activity two: Understand your own cultural factors (20 minutes)

Give each learner a copy of the worksheet for lesson four. Ask the learners to think about their own circumstances and write about how each factor influences their dietary choices and eating habits.

4. Wrap up (5 minutes)

Tell the learners that South Africa is trying to encourage a culture of healthy eating, for example, by introducing the Food Based Dietary Guidelines (FBDG). Ensure all the learners know about the Food Based Dietary Guidelines.
Worksheet: Grade nine lesson four

Task one: Learn about your classmates

Interview one of your classmates about their eating habits by asking the questions below:

<table>
<thead>
<tr>
<th>Questions</th>
<th>Answers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Who usually buys the food in your house?</td>
<td></td>
</tr>
<tr>
<td>Where does your family usually do food shopping?</td>
<td></td>
</tr>
<tr>
<td>Who prepares the food in your house?</td>
<td></td>
</tr>
<tr>
<td>Which meals do you usually eat: breakfast, lunch and supper?</td>
<td></td>
</tr>
<tr>
<td>Where do you eat these meals and who do you eat them with?</td>
<td></td>
</tr>
<tr>
<td>Which foods don’t you eat?</td>
<td></td>
</tr>
<tr>
<td>Explain why you don’t eat the above foods (for example, religion, personal preference)</td>
<td></td>
</tr>
<tr>
<td>Which foods are your favourite?</td>
<td></td>
</tr>
<tr>
<td>Explain why these foods are your favourites (for example, their taste or how they look)</td>
<td></td>
</tr>
<tr>
<td>Do you celebrate any religious or cultural festivals that involve food? If so, which ones?</td>
<td></td>
</tr>
<tr>
<td>Describe which foods you eat at these religious or cultural occasions?</td>
<td></td>
</tr>
</tbody>
</table>
Task two: Analyse your eating habits

Describe how you think the factors below influence what you and your family eat.

<table>
<thead>
<tr>
<th>Factor</th>
<th>How it influences my eating habits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ecological (food bought from a shop or a farmer’s market or grown at home)</td>
<td></td>
</tr>
<tr>
<td>Social (foods you eat when you go out or when you are with your friends, versus foods you eat when you are at home)</td>
<td></td>
</tr>
<tr>
<td>Economic (do you and your family often eat at restaurants and buy take-aways? Does your family eat convenience meals or do you usually prepare foods from ingredients at home? Where does your family usually buy food)?</td>
<td></td>
</tr>
<tr>
<td>Cultural (which foods do you eat or avoid because of your religion, culture or the area you live in)</td>
<td></td>
</tr>
<tr>
<td>Political (do you eat foods that are local or do you also eat foods that come from other countries)</td>
<td></td>
</tr>
</tbody>
</table>
Lesson five: Super-sizing South Africa (40 minutes)

1. Outcomes

By the end of lesson five the learners should be able to:

• discuss global social and economic trends that affect eating habits and understand why they have that effect
• give suggestions to improve the eating habits of South Africans that take into account certain trends that can lead to poor eating habits.

2. Teacher’s corner

Lesson five involves discussing recent social, economic, ecological and political trends that lead to poor eating habits. The following is background information on these issues.

Obesity in children

Since 1994 the prevalence of obesity in young children in the USA has doubled, and one in four children are overweight and 11% are obese. In South Africa, the statistics are no more comforting. More than 30% of adolescent girls and nearly 10% of boys are either overweight or obese. Primary schools show a similar trend with 22% of girls and 17% of boys falling into these categories. In a combined sample of children under the age of nine years old, 17% were already overweight or obese.

Overweight or obese children tend to remain overweight or obese until the age of twenty and have a higher risk of being obese adults. Obese adults are at increased risk of heart disease, diabetes, joint and gall bladder disease.

Factors that contribute to the obesity epidemic

Genetics

If one or both of a child’s parents are overweight or obese, the child will be more likely to gain weight. Obesity tends to run in families and obese parents are likely to have obese children. There is scientific evidence that certain individuals are less effective at burning fat, which predisposes them to obesity.

Environment

Genetic factors are, however, only partly responsible for the development of obesity. Children without a family history of obesity may also become obese if they are exposed to an over-abundance of high-energy foods. However, research indicates that the individuals at greatest risk for obesity are those with a genetic tendency, who are chronically exposed to excessive food intake.

Ethnicity and urbanisation

Some population groups tend to gain weight more easily than others when they are exposed to a high-fat western diet. This occurs when people who have been eating high-fibre, low-fat diets change to high-fat, high-energy diets because of urbanisation and westernisation. This occurs every day in South Africa as rural people move to the cities. The eating habits of rural children change when they move to the city as they eat fewer grains, fruits, vegetables and sour milk and start having more high-fat fast-foods, high-energy snacks and fizzy drinks.

Inactivity

Modern transport and labour-saving devices such as washing machines and vacuum cleaners make our lives easier, but decrease our energy expenditure and therefore contribute to weight gain.

Compared to 30 years ago, today’s children are extremely inactive and there are a number of reasons for this.

• Many children spend hours doing sedentary activities such as watching TV and playing computer games
• Many schools don’t have facilities for all their learners to participate in sport and some schools only concentrate on their best sports performers
• Children, who in the past might have walked or ridden their bicycles to school, now get lifts in cars or taxis.
Modern lifestyles

People are eating more meals away from home (at restaurants), buying takeaways and high-fat and high-energy snacks. More calorie-dense foods are available at many tuck shops. In addition, portion sizes are larger than before and can often be “super sized”. With modern lifestyles being so busy, there is a trend towards skipping meals and then making up for it by eating very large meals.

Psychological factors

Many parents express their love for their children through food (and other material goods) and encourage their children to eat more than they need. Food may also be used to control children or as a reward or pacifier.

It’s easy to see why our children are increasingly at risk of becoming overweight or obese. If children are continually exposed to energy-dense foods and not encouraged to be physically active, their body mass will increase.

Media

Marketing and advertising play an important role in how people perceive foods in terms of their acceptability and desirability.

All these factors play a role in promoting weight gain and increasing the number of people who are at risk for developing obesity. Some factors can’t be changed, but there are others that we can change.

Current trends

Consumerism

Consumerism is a trend reflected by the following factors:

- More people eat away from home
- The use of dietary and herbal supplements, and foods for specific groups, for example, dieters, women, athletes, and older adults
- The use of convenience and functional foods
- Higher income populations in developed countries want low-kilojoule, low-fat foods, and simple, natural and fresh ingredients.

Eating away from home

Internationally, the proportion of money spent on food eaten away from home and the number of restaurants have been steadily increasing since the second half of the twentieth century. People may eat at sit-down restaurants, fast-food outlets and cafes, or they may buy food from street vendors.

Weight loss products, dietary supplements and gym memberships

The increase in sales of weight loss products, diet foods, gym memberships and exercise equipment has been dramatic as people continue their quest for weight loss. Pills, liquids or powders that contain nutrients and other ingredients, such as herbs, are increasingly available.

Functional foods

Functional foods are those that contain nutrients (or non-nutrients), that may help to protect against disease. These foods may have been fortified, have specific phytochemicals or active micro-organisms added, or have been developed using special techniques.
3. Activities
For activity one you’ll need newspapers and magazines for the learners to look through to find examples of trends that affect eating habits.

Activity one: Trend task force

Activity part one: Discussion (5 minutes)
Open the discussion by asking the learners what they think a trend is. Discuss the trends that influence eating habits. List all ideas and group them according to the headings provided above.

Activity part two: Finding a trend (15 minutes)
Divide the learners into groups and ask them to go through newspapers and magazines to find articles and adverts that relate to the trends discussed. Each group should choose one item that they have found and elect a spokesperson from the group to present their findings.

Activity part three: Task team on obesity (15 minutes)
Tell the learners that they have been assigned by the Minister of Health to devise a strategy to fight childhood obesity or, better still, to prevent it from occurring in children. Ask them to come up with a plan that takes the trends discussed above into account and will help to fight obesity.

4. Wrap up (5 minutes)
As this is the last lesson plan, spend a few minutes reminding the learners of the importance of what they have learned. Sum up how what they have learned will help them lead a healthy lifestyle. Remind the learners of the importance of leading a healthy lifestyle and end the lesson by encouraging them to put their healthy lifestyle knowledge into practice.
Task one: Tackling obesity

You have been assigned by the Minister of Health to devise a strategy to fight childhood obesity or better still, prevent it from ever occurring. Come up with a plan for South Africa that takes as many of the trends and factors that you discussed in class as possible into account.

You discussed the following factors in class:

- Genetics
- Environment
- Ethnicity and urbanisation
- Inactivity
- Modern lifestyles
- Psychological factors
- Media.

You discussed the following trends in class:

- Consumerism
- Eating away from home
- Weight loss products, dietary supplements and gym memberships
- Functional foods.

Choose some of the factors or trends listed above and complete the table below to help you get an idea of how to structure your plan.

<table>
<thead>
<tr>
<th>Factor or trend</th>
<th>How will you address it</th>
</tr>
</thead>
<tbody>
<tr>
<td>What is the objective of addressing this factor or trend?</td>
<td></td>
</tr>
<tr>
<td>How will you address this factor or trend?</td>
<td></td>
</tr>
<tr>
<td>What will the challenges be when addressing this factor or trend?</td>
<td></td>
</tr>
<tr>
<td>Who will be the key role players in your strategy?</td>
<td></td>
</tr>
<tr>
<td>How will you monitor the impact of this strategy?</td>
<td></td>
</tr>
</tbody>
</table>

Once you have decided on a plan for each factor, put together a presentation for the Minister of Health to be presented to the class at a future date.
Discovery has endeavoured to ensure that all the information contained in the lesson plans and supporting literature is accurate and based on credible clinical and scientific research. Discovery cannot however, be held responsible for any injury, loss or damages that may result from reliance on the information, and by utilising the information the user specifically waives any claim it may have against Discovery in this regard. Users are advised that each individual has their own unique clinical make-up and while the lesson plans were designed with all individuals in mind, some may respond differently to others. Users are therefore advised to take due caution when participating in any of the activities recommended.
Vitality Schools Programme
Tel: 0860 109 939
Email: vitalityschools@discovery.co.za
www.discovery.co.za

An authorised financial services provider