

# 1.1 Medical terminology

## STARTER Medical terms

What is your understanding of medical terminology? Write your answers in the space below. Try to include any medical terms you already know.

Medical terminology is all terms used in medicine and all health providers use to save time and facilitate communication like hypoglycemia  $\Rightarrow$  low sugar in the blood.



### Discussion: Using medical terminology

In pairs, discuss when you might need to know medical terminology. Write your answers below and then discuss with the class.

1. in Emergency cases

2. when I visit my doctor

Activity 2

Match the term



Match the medical word with its meaning:

athr-	3
heam-	5
lipid	4
osteo-	1
cardi-	2

1	refers to the bones
2	refers to the heart
3	refers to the joints
4	refers to fats
5	refers to the blood



Activity 3

Identify the prefix and suffix



Identify which word has a prefix and which has a suffix from the following medical words:

abnormal

biology

Prefix:

ab

Suffix:

logy

## 1.2 Medical prefixes, suffixes and combining vowels



Activity 4

### Everyday prefixes

Read the words below. Describe what each word means. When you are finished, remove the prefix (in bold) and discuss the new meaning of the word with the class.

**un**friendly

friendly & kind

unfriendly: opposit meaning

unkind

**dis**agree

agree & accept

disagree opposit meaning

A **prefix** changes the meaning of a word.

## Practise the prefix

Your teacher will pronounce each of the prefixes listed in the textbook. As a group, repeat each one after your teacher.

Then, take turns to pronounce each prefix.

If you find it difficult to say any of the prefixes, write them in the following space so you can practise later.

Practise  
makes  
perfect

Osteoporosis.

Cardiovascular.

hypothyroidism.

Word	Meaning
Abnormal	not normal
Anaemia	absence of blood components
Carcinogenic	Substances that cause cancers
Biology	study of human body
Dermatology	study of skin
Arthritis	Joints inflammation
Dehydrate	dryness

## 1.3 Medical record reports

### STARTER Keywords

In pairs, look at the list of keywords below. What type of word is it? Is it a noun or an adjective? We call this 'form'. Then, describe what the word means.

If you are not sure of one of the words, ask your teacher what you can do to research the word.

It is useful to know the meaning of these words. They will help you with this lesson.

Keyword	Form	Description
allergies	N	immune system reaction to food or medication
confidential	adv	secret
examination	N	Tests

## Demographic information

Practise filling out the demographic information using the statement below.

Fatima was born on 15/05/2000. She was born in a hospital in the UAE. When she was born, she weighed 3.18 kg. She is complaining of headaches and sometimes feels tired. Fatima has had a bad pain in her chest for the last two days.

Maryam is 25 years old. She was born in the UAE and her parents are from the UAE. She has two sisters. Maryam regularly feels dizzy and tired. She is also very thirsty, and her vision is blurry.

## Medical record report 1.

Name: Fatima Age: 19

Gender: F Ethnicity: UAE

Main complaint: headache - tired - bad Pain  
in her chest

## Medical record report 2.

Name: Maryam Age: 25

Gender: F Ethnicity: UAE

Main complaint: dizzy - tired - thirsty -  
blurred vision

Discuss the difference between the two statements, did one have better information than the other? Try to explain why.

## 1.3 Medical record reports



### Discussion: Medication and allergies

In your own words, write what you think the words 'medication' and 'allergy' mean. Discuss your answer with the class.

medication: any history of health  
care or medicine

Allergy: immune system reaction  
to any food or medicine

Why do you think a health professional would write this information on a medical record report?

To be easier to find them especially  
in emergency cases.

To keep a record for all patients  
to find out about allergies or health  
diseases



Match the words



Can you match the words with the right description?

<p>symptoms 4</p>	<p>This is when the symptoms of an illness have disappeared. 1</p>
<p>remission 1</p>	<p>Someone fell and broke a bone in his or her leg. 2</p>
<p>diagnosis 5</p>	<p>Your leg is red and swollen because of an injury. 3</p>
<p>chronic 6</p>	<p>This is a person who might be dizzy, tired and has swollen hands. 4</p>
<p>inflammation 3</p>	<p>Your doctor has checked your symptoms and has decided what your illness is. 5</p>
<p>fracture 2</p>	<p>This type of disease lasts more than three months. 6</p>

## 1.4 Responding to medical instructions



### Discussion: What's the reason?

In pairs, discuss why is it useful to know the medical terms listed in textbook? Make some notes below.

1- For Emergency Cases

2- to understand my case if I visited the doctor.

3- to provide information quickly in emergency cases



Activity 13

### Scenarios



Read the following sentences. What part of the body do you think each person might need help with?

I have pain in my chest and have been diagnosed with cardiovascular disease.

heart

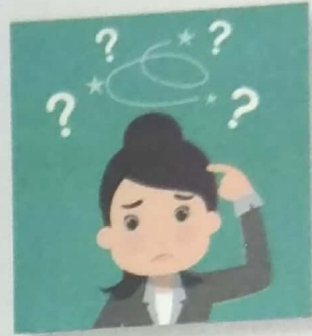
I am going to see a dermatologist today.

skin

I feel pain when I walk. I think I have arthritis.

Joints

Look at the statements below. Can you work out what the statements mean? Use what you have learned so far to help you.



### Remember

Read the suffix first, then the prefix.

I think I am hyperglycaemic.

..... high blood sugar .....

I think I should visit my doctor. I feel like my heart rate is abnormal.

..... Cardiovascular .....

You went to see your doctor and she asked you what your symptoms are.

..... Try to diagnose the problem .....

I think I should visit my doctor. I feel like my heart rate is abnormal.

..... hypertension / Cardiovascular Problems .....

# 1.4 Responding to medical instructions



Activity 15

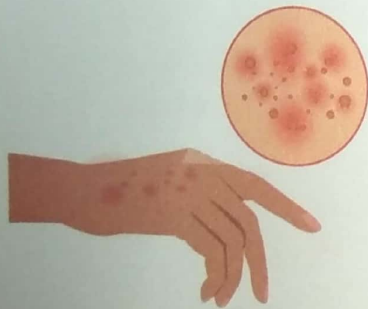
## Fill in the blanks

Read the following sentences. Fill in the blanks by using the prefix, suffix or combining vowel from the box below.

ab	itis	o
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I feel dizzy. I also feel a lot more thirsty than usual.  
I think my blood sugar is ..... *ab* ..... normal.



My doctor said I have inflammation of my skin. This  
is called dermat *itis* .....



My friend was diagnosed with a disease of the heart.  
This is called cardi *o* ..... vascular disease.

## Spelling medical terms

Read the following definitions. Write the medical terms in the space provided.

1. A disease of the heart

Cardiovascular

2. The study of life

biology

3. A disease of the bones

Osteoporosis

4. A skin specialist

Dermatologist

5. The name of the condition when a person has high blood sugar levels

hypertension

**Notes:**

## End of unit quiz

1. Why is it important to understand medical terminology?

- 1- Emergency cases (help)
- 2- understand my disease

2. Match the medical terms with their meanings.

carcin-	4
cardi-	1
chem-	7
derma-	3
gastr-	5
glyc-	2
nasal-	8
thromb-	6

1	heart
2	sugar
3	skin
4	cancer
5	stomach
6	clot
7	chemical
8	nose

3. Which of the following should be included in a medical record report?  
Circle the correct answers.

Friends' names	Home address	Likes and dislikes
✓ Allergies	✓ Medical complaint	Vehicle information
✓ Date of birth	✓ Medical test results	✓ Age

Write the meanings of the word, suffix and prefix below.

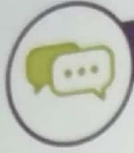
abnormal	hyper-	-itis
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ab: away from:

hyper: high

itis: inflamati

## 2.1 Modifiable and non-modifiable factors



**Discussion: What causes an illness or disease?**

Discuss with your class the causes of illnesses and diseases. Make use of the space provided.

1. modifiable factors

2. non-modifiable factors

bacteria / parasites / lack of hygiene

Communicating with ill people.





Decide if each of the following risk factors for developing disease are modifiable or non-modifiable. Write the correct answer in the space provided.



## Remember

A modifiable risk factor is a risk factor you have control over. This means you can reduce your chances of getting certain diseases.

Sedentary lifestyle

M

Family history

non

Overweight

M

Smoking

M

High blood pressure

M

Genetics

non

Age

non

Type 2 diabetes

non  
M

Gender

non

High cholesterol

M

Stress

M

Unhealthy diet

M

## 2.1 Modifiable and non-modifiable risk factors



Activity 2

### Risk factors

Now you have identified modifiable and non-modifiable risk factors, you need to explain what they mean. Create your own definition of modifiable and non-modifiable risk factors.

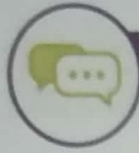
**Modifiable risk factor:**

Disease factors that can be modified and controlled by humans like smoking

**Non-modifiable risk factor:**

Disease factors that can't be controlled like genetic factors. Diabetes (1)

## 2.2 Personal health behaviours for disease prevention



### Discussion: Personal health behaviours

How do personal health behaviours affect your health?

- 1- Eating healthy food
- 2- cleaning myself.
- 3- exercise daily.
- 4- good quality sleep

How many different personal health behaviours can you think of?

- 1- healthy life style.
- 2- Practicing.
- 3- sleeping
- 4- hygiene

Discuss the impact that each of these behaviours can have on your health.

having poor sleep will lead to hypertension

eating fast food will lead to overweight and high blood pressure



Activity 3

## Healthy diet

Think back to the nutrition unit you studied last year. What you would consider to be a healthy balanced diet. List the foods or food groups in the following space.

1. Vitamins

2. Carbohydrates

3. Protein

4. minerals

5. Sugar

6.

7.

8.

## 2.2 Personal health behaviours for disease prevention

Give an example of what one day of healthy eating could consist of.

Meal	Foods
Breakfast	milk - egg - whole grain bread Apple
Lunch	Chicken - rice - vegetables fresh juice .
Dinner	Lambch whole grain bread Fruites
Snacks	Pop corn - Orange juice



Link each of the following nutrients to the impact they can have on your body if you do not have enough of them.

Iron 3

Vitamin D 4

Vitamin C 2

Calcium 1

Vitamin B12 5

1 Weak bones

2 Scurvy - bleeding gums, fatigue

3 Anaemia - lack of energy

4 Bone pain/muscle weakness

5 Tired/weak, constipation

Notes:

.....

.....

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.....

.....

.....

## 2.2 Personal health benefits for disease prevention



Activity 2

### High-fat foods

Which of the following foods can raise your LDL (bad) cholesterol? Circle the correct answers.





## Get enough sleep

Do you currently get the recommended 7-9 hours of sleep per night? Yes / No

yes

How many hours of sleep do you usually get? ..... 8 ..... hours

What do you think are the most common reasons for not getting enough sleep?

having a late big meal

browsing internet.

stress.

Suggest ways someone who is not getting enough sleep could improve their quality of sleep and increase the amount of sleep they are getting.

have a small healthy meal

avoid using mobile phone before

sleeping

avoid stress

read a book before sleeping



## 2.2 Personal health behaviours for disease prevention



ACTIVITY

### How can you reduce your risk?

Read the following statements about reducing your risk of developing non-communicable diseases. Write 'Y' in the space provided if you think it is a way to reduce non-communicable diseases. Write 'N' in the space provided if it is not a way to reduce non-communicable diseases.

1. Eating a healthy and balanced diet

 Y

2. Proper hand washing

 Y

3. Do enough physical activity

 Y

4. Do not smoke

5. Get enough good quality sleep

 Y

6. Sneeze into a tissue

Now discuss your answers with your class.



### Discussion: Personal hygiene

Think about your personal hygiene. Discuss all the different things you regularly do that contribute towards it.

1- washing hands regularly

2- taking bath daily

3- wear PPE when you have to take care of sick person.



Activity 8

## Think of a lifestyle change

Think of one lifestyle change you can make that will reduce your risk of developing a non-communicable disease. Write your goal in the space provided. Then make note of which non-communicable diseases you could reduce your risk of developing. Now discuss with your class your goal and see what goals other students have made.

Goal: ..... Reduce the risk factor of having Flu

Reduced risk of developing: ..... good personal hygiene  
..... Providing my body with VC



Activity 9

## Personal hygiene and disease

List three ways people can improve their personal hygiene.

1. .... enough sleep

2. .... personal hygiene

3. .... healthy food and physical activities

## 2.2 Personal health behaviours for disease prevention



Activity 10

### Personal health behaviours

For the personal health behaviours below, answer the following questions. Give the correct answers.

#### Healthy diet

1. How is a healthy diet a modifiable risk factor?

You cannot change your diet	You can improve your diet ✓	Your diet is the same every day
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2. Which diseases can you reduce your risk of developing by having a healthy diet?

High cholesterol ✓	Chickenpox	Asthma
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3. How could you improve your diet to reduce the risk? Write your answers in the following space.

Eating balanced meals will protect me from having LDLh which cause Cardiovascular diseases and hypertension

#### Adequate sleep

1. How is having adequate sleep a modifiable risk factor?

You cannot change the amount and quality of sleep you get	You can change the amount and quality of sleep you get ✓	The quality and amount of sleep you get is not modifiable
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2. Which diseases can you reduce your risk of developing by having adequate sleep?

Heart disease ✓	Asthma	Measles
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3. How could you improve your sleep to reduce the risk? Write your answers in the following space.

Sleep between 7-9 hours daily  
having a good quality sleep in dark  
quiet place.

### Personal hygiene

1. How is personal hygiene a modifiable risk factor?

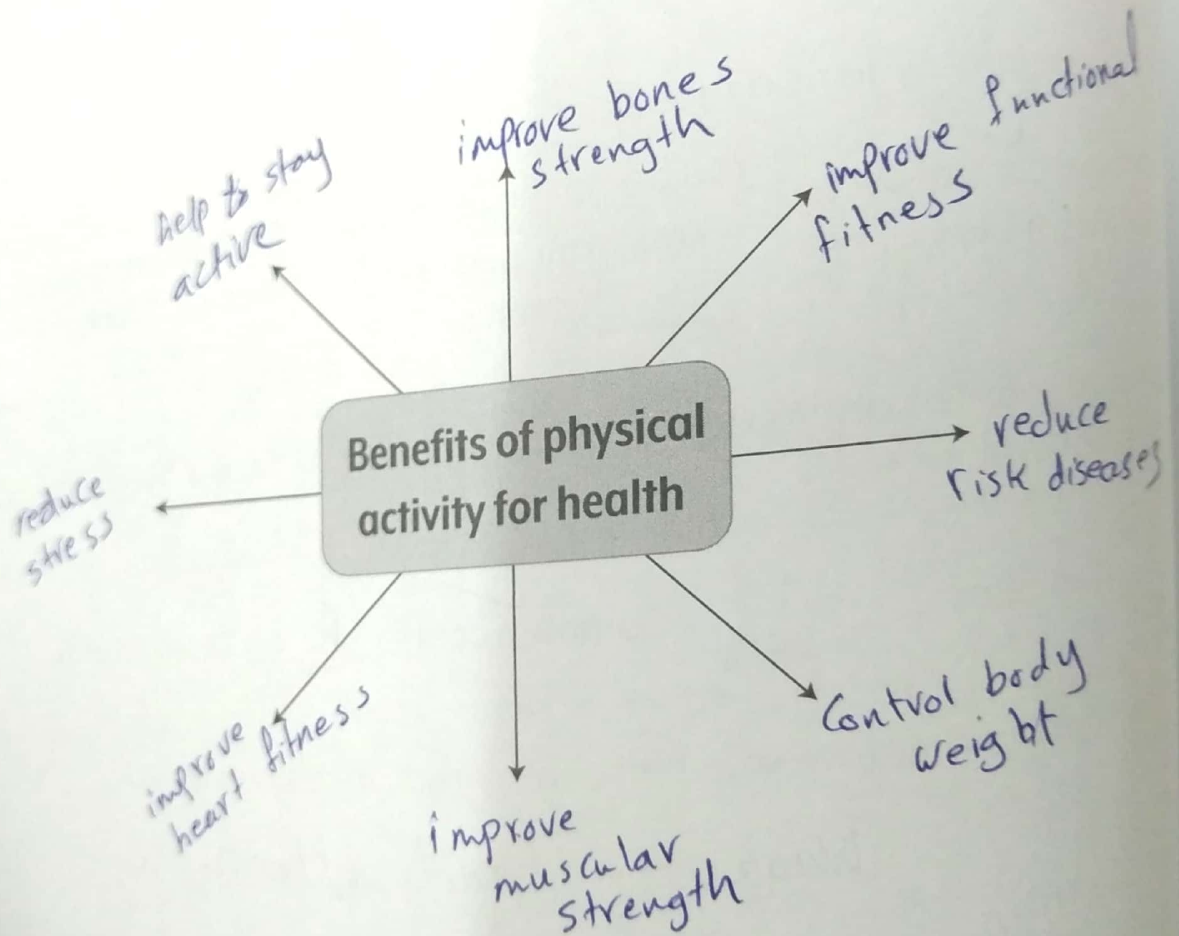
You have control over your personal hygiene ✓	You do not have control over your personal hygiene	Personal hygiene is a non-modifiable risk factor
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2. Which diseases can you reduce your risk of developing by keeping good personal hygiene?

Diabetes	Common cold ✓	Osteoporosis
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3. How could you improve your personal hygiene to reduce the risk?

Wash my hands after using  
bathrooms and use steriked wipes  
when I communicat with an sick person



# Do you do enough physical activity?

Activity 11

Answer the following questions about physical activity.

1. Based on the World Health Organization physical activity guidelines do you currently do enough exercise? Yes / No

2. How many minutes of physical activity have you done in the last week?  
0 minutes

3. What type of physical activity have you taken part in this week? Write your answers in the correct box.

Moderate intensity

Vigorous intensity

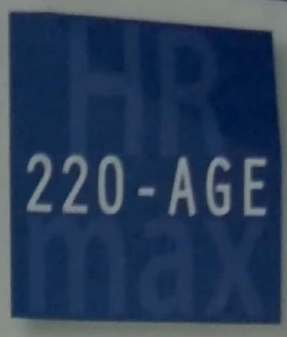
4. How do you think you could fit more physical activity into your weekly routine?

learning new sport

220  
202

Exercise intensity depends on the percentage of your maximum heart rate. Therefore, it is helpful to know what your maximum heart rate is.

To calculate maximum heart rate, subtract your age from 220. For example, if you are 17 years old, your Maximum Heart Rate (MHR) would be 203 Beats Per Minute (BPM) ( $220 - 17 = 203$ ).



Activity 13

### Calculate your maximum heart rate



Calculate your own maximum heart rate.

$220 - 17$  (age) =  $203$  BPM

Maximum heart rate: ..... BPM

Now that you know what your maximum heart rate is, this can be used to work out what percentage of your maximum heart rate you are working at.

Knowing the percentage of maximum heart rate shows how intense the physical activity is.

$(\text{Heart rate} \div \text{Maximum heart rate}) \times 100 = \text{percentage of MHR}$

So, if your maximum heart rate is 203 and your current heart rate is 85 you would be working at 41.87% of your maximum heart rate.

$(85 \div 203) \times 100 = 41.87\%$

## 2.3 Physical activity and disease



Activity 14

### Calculate the percentage of maximum heart rate

Answer the following questions about maximum heart rate.

1. If your heart rate is 75 BPM, calculate the percentage of MHR that you would be working at.  $\frac{75}{160} \div \frac{203}{100} \dots\dots\dots$  (MHR)  $\times 100 = \dots\dots\dots 36.9 \dots\dots\dots$  %

2. What exercise intensity would you be working at? ~~vigorous~~ <sup>strong</sup> intensity

3. Now calculate your own MHR and percentage of MHR if your heart rate is 80 BPM:

$$\frac{80}{160} \div \frac{203}{100} \dots\dots\dots = \dots\dots\dots 39.4 \dots\dots\dots \%$$

4. What exercise intensity does it mean you are working at? moderate



Activity 15

### Video: Sedentary lifestyle

Make notes below on the video about a sedentary lifestyle.

.....

.....

.....

.....

.....

.....

.....

.....







## 2.3 Physical activity and








Activity 16

### How much time do you spend sitting?

Think about how much time you spend sitting down in a day. Complete the table to work out how many hours per day you spend sitting down.

Activity	Time spent doing it (in minutes)
Eating breakfast 	10 m
Travelling to school 	30 min
Sitting in lessons 	7 hours
Eating lunch 	20 min

Travelling home 	20 min
Watching television 	—
Using an iPad/laptop 	5 h
Eating your evening meal 	10 min
Other sitting activities 	4 h
Total time:	

## 2.3 Physical activity and disease



Activity 17

### Reduce your time spent sitting

In a small group, think of ways that you could reduce the amount of time you spend sitting down.

How could you become more active in your daily life?

Joining group sports  
for running, swimming

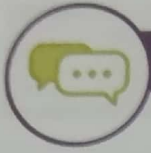
What activities do you do regularly with your friends and family?

Walking

What could you do to make these activities healthier or more active?

Practice with my friends  
to have fun

## 2.4 Immunisation for disease prevention



### Discussion: Vaccinations

Discuss as a group and answer the following questions.

What do you think a vaccination is?

Something injected into a person to protect them from diseases

Can you remember having a vaccination, what was it like?

Yes, (HPV)

How many different names of vaccinations you can think of? Write them in the following space.

Tuberculosis,

MMR

OPV

## 2.5 Screening



Activity 22

### Screening service

Look at the types of screening in the following table. Put them into the correct column that shows when they should be carried out.

1 Blood pressure check	3 Cholesterol	3 Bowel cancer
2 Eye checks for glaucoma	2 Cardiovascular risk	1 Skin cancer
3 Hearing impairment	3 Osteoporosis	2 Type 2 diabetes

Begin in the 20s and 30s	In the 40s	In the 50s and 60s
Blood Pressure --	Eye checks --	Bowel cancer
Skin cancer --	cardiovascular risk --	osteoporosis
	Type 2 diabetes --	Hearing impairment



Activity 23

### Types of screening services

In pairs, think of as many different types of screening services as you can. Write your answers in the space provided.

Blood Pressure

Hearing impairment

Type 2 diabetes

Activity 24

### Fill in the blanks



Look at the words in the box. Fill in the blanks in the following sentences using the words in the box.

screening                      treatment                      detect

I do not have any symptoms, but there is a history of heart disease in my family. I should go for ... Screening ..... to check for heart disease.

I have been diagnosed as having high cholesterol. I should go to my doctor for treatment ..... and advice.

I have noticed that I have been feeling dizzy lately. I have also been getting headaches. I should go to the doctor to see if she can .. detect ..... a health problem.

Activity 25

### Physical health assessments



Think about physical health assessments (checks that a nurse may carry out to measure certain parts of your health). Explain what part of health each of the following checks measure.

#### Cholesterol

What part of health does it measure?

heart diseases

## 2.5 Screening

### Osteoporosis

What part of health does it measure? ..... *bone disease*  
 ..... *Calcium deficiency*

### Cardiovascular

What part of health does it measure? ..... *heart*

### Bowel cancer

What part of health does it measure? .....



Activity 26

### Screening or diagnostic test

Look at the statements below and identify if they are describing a screening test or a diagnostic test.

<i>s</i> Carried out on someone who appears to be healthy.	<i>s</i> Indicates the possibility of disease but requires further tests.	<i>d</i> Very specific and gives accurate results.	<i>d</i> Carried out on someone who has symptoms.
<i>d</i> Provides definite diagnosis.	<i>d</i> Expensive but needed for accuracy.	<i>s</i> Wide positive result threshold.	<i>s</i> Cheap and carried out on large numbers.