**Unit 6 HEART DISEASE**

**Task 1**

Before you read an article, think of what you already know about the subject. Discuss the following questions with a partner.

*What are the causes and symptoms of heart disease?*

*Is heart disease hereditary?*

*What ways do we have to prevent and treat heart disease?*

*What about heart disease and sport?*

**Task 2**

For each paragraph, read the first sentence and think of a question that you expect this paragraph to answer. Then choose the question below that is most like your question. The first paragraph has been done as an example.

\_\_ A How has the change in attitude affected people´s behaviour?

\_\_ B How are attitude and behaviour changes affecting people´s health?

\_\_ C How are people´s attitudes changing?

\_**1**\_ D What are the effects of these discoveries about heart disease?

**Heart Disease and Changing Attitudes**

1. In the last decades of the twentieth century, medical researchers showed that heart disease is associated with certain factors in our daily lives: stress, smoking, poor nutrition, and lack of exercise. Doctors and other health experts began to emphasise the fact that we can reduce the risk of heart disease by paying attention to these factors. As a result, many people realize that there is a connection between heart disease and lifestyle.
2. This new awareness is changing public attitudes about health. In the past, people tended to think that it was sufficient to have access to doctors on whose expertise they could rely. Now people understand that merely receiving the best treatment for illness or injury is not enough. They have learned to take more responsibility for maintaining and improving their own health.
3. The shift in attitude can be seen in some behavioural changes that have occurred since the 1970s. In the United States today, many smokers have broken the habit and fewer people take it up. The percentage of smokers is far below the level of the 1960s and 1970s. People are becoming more serious about reducing stress. Many have changed their diets and are eating food with less fat and cholesterol. More people are aware of the benefits of regular and frequent exercise like walking, running, and swimming; some even walk or bicycle to work instead of driving or using public transportation.
4. The health effects of these changes in attitude and behaviour are clear. Since the 1950s, the number of deaths from heart disease per 100,000 has fallen. A partial explanation for this is that better diagnosis and treatment is helping people avoid or survive heart attacks. However, health experts have no doubt that much of the improvement has occurred because a better-educated public has become aware of the benefits of prevention.

**Task 3**

Identify the sentence that best expresses the main idea of the article.

1. Better methods of diagnosis and treatment have reduced the number of deaths from heart disease in the United States.
2. Medical research has shown that people should reduce the amount of fat they eat.
3. As a result of information about the causes of heart disease, people are changing the way they think about health care and are leading healthier lives.
4. The percentage of Americans who smoke today is much lower than it was in the 1970s.

**Task 4**

Look back at the article to answer the following questions.

1. What factor does the writer NOT associate with heart disease?
2. Unhealthy food
3. Cigarettes
4. Poverty
5. Lack of regular exercise
6. The article suggests that doctors in the past did not always inform their patients about the importance of exercise and good nutrition for health. True or false?
7. What change in attitude does the writer describe?
8. It is still too early to see results from the change in attitude that the article describes. True or false?

**Task 5**

Complete the flowchart below with the steps in the process of change in attitudes towards heart disease.

**Task 6**

Find words in the article that are similar in meaning to the following:

* To be connected with something (par. 1)
* To give special importance to sth. (par. 1)
* Knowing sth. (par. 2)
* Enough (adjective) (par. 2)
* A change in position or direction (par. 3)
* Happened, existed (par. 3)
* A feeling of being uncertain or not believing sth. (par. 4)
* Helpful effect (par. 4)

**Task 7**

Complete the sentences below with suitable forms of words from 6.

1. A vitamin deficiency occurs when a person´s diet does not have \_\_\_\_\_\_\_\_\_\_ vitamins to maintain good health.
2. The article raised \_\_\_\_\_\_\_\_\_ about how effective the new drug really was.
3. There is little \_\_\_\_\_\_\_\_\_\_\_ of the health risks associated with obesity.
4. Sugar \_\_\_\_\_\_\_\_\_\_\_ naturally in fruit.
5. We´ve seen a \_\_\_\_\_\_\_\_\_\_ in power away from workers towards employers.
6. She \_\_\_\_\_\_\_\_\_\_\_the importance of early diagnosis of the disease.

(adapted from Pakenham, K.J. *Making Connections.* CUP, 2004)

**Task 8 Grammar - tenses**

Explain the differences between the sentences:

1. People are becoming more serious about reducing stress. – People become fat after giving up smoking.
2. Many people have changed their diets. – Many people changed their diets.
3. The number of people with heart disease has fallen. – The number of people with heart disease has been falling.

**Task 9 Listening**

(https://ed.ted.com/lessons/what-happens-during-a-heart-attack-krishna-sudhir)

Watch and answer the questions below:

1. What causes a heart attack?
2. What are the symptoms of a heart attack?
3. How should one respond to a heart attack?
4. How do doctors diagnose and treat a heart attack?
5. What can we do to prevent a heart attack?

Watch again and fill in the missing words:

1. Cardiovascular disease causes problems such as heart attacks and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .
2. Arteries are the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ that supply oxygenated blood to the heart.
3. If one of the plaques \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ or cracks, a blood clot will form around it.
4. The situation can quickly get worse in the absence of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .
5. In the worst case scenario a heart attack can cause \_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_ .
6. Some people experience nausea and \_\_\_\_\_\_\_\_\_\_\_\_ of breath.
7. In people with diabetes a heart attack can be \_\_\_\_\_\_\_\_\_\_\_\_\_\_ .
8. Doctors use a blood test to \_\_\_\_\_\_\_\_\_\_\_\_\_ heart muscle damage.
9. Cardiologists can reopen the blocked artery by \_\_\_\_\_\_\_\_\_\_\_\_\_ it with a balloon.
10. More serious blockages might require coronary artery bypass \_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

**Task 10 Reading - Sport injuries**

More than 10 million sports injuries occur each year. Most sports injuries are due to either traumatic injury or overuse of muscles or joints.

**Wounds**

A **wound** is any break in the skin or body surface. **Cuts** can be caused by sharp edges such as jewellery or stones. When the skin is cut, the blood vessels at the wound edges are cut straight across, so blood loss is very likely. **Grazes** are wounds in which the top layers of skin are scraped off. Grazes are commonly caused by a sliding fall (trip on a running track) or friction burn (hands sliding along a rope).

## Bone injuries

A **fracture** is a break or crack in the bone. Bones can break when a *direct impact* is received (hockey stick striking the shin) or *indirect force* is produced by a twist or a wrench (a trip or stumble).

## Joint/Muscle Injuries

**Sprain**

Injury to a ligament at, or near, a joint. It is often the result of a sudden or unexpected wrenching movement at the joint that pulls the bones within the joint too far apart and tears the tissues surrounding the joint.

**Strain**  
Overstretching of the muscle, which may result in a partial tearing.

**Deep bruising (soft tissue injury)**  
These injuries are usually accompanied by bleeding into the damaged area, which can lead to pain and swelling.

**Rupture**  
Complete tearing of the muscle, which may occur in the fleshy part or in the tendon.

## Heat Exhaustion

Heat exhaustion, an advanced condition of *hyperthermia*, is very common in marathon runners; especially in hot, humid conditions. The body temperature rises, which makes blood rush to the skin to cool it down. This makes less blood available to the working muscles and so extreme tiredness, breathlessness and dizziness occurs**.**

## Unconsciousness

Unconsciousness occurs from an interruption of the brain’s activity.

## Shock

The circulatory system distributes blood round the body, so that oxygen and nutrients can be fed into the tissues. When the system fails, circulatory shock will develop. If not treated immediately, vital organs such as the brain may fail. A typical cause of shock is a blow to the chest (winding).

**Symptoms** include: cold and pale skin, shaking or chills, chest pain, a weak but rapid pulse, shallow breathing, dizziness or general weakness, vomiting, unconsciousness.

Test your knowledge of injuries. Mark the following statements **True (T)** or **False (F)**.

|  |  |
| --- | --- |
| 1. A wound where the top layers of skin are scraped off is called a rupture.  2. Both sprains and strains affect muscles.  3. Hypothermia occurs when the body is exposed to excessive heat.  4. A player who is winded and knocked to the ground could go into shock.  5. Shock occurs when blood pressure drops and the organs do not receive enough blood. | ***T/F***  ***T/F***  ***T/F***  ***T/F***  ***T/F*** |

**Task 11 Vocabulary**

Complete the sentences with the words below.

*bleed scar concussion minor pain swollen blister bruise scratched wound sprained*

1. My ankle is very………….
2. Do you ………………… easily?
3. I´ve …………………. my wrist.
4. This ……………. was caused by flying glass.
5. The ……………….will disappear in a few days.
6. The operation only left a small ……………….
7. Look where the cat …………………. me.
8. His injuries are all fairly………………….
9. Are you in…………………….? Do you need an Aspirin?
10. I´ve got a terrible……………………on my foot.
11. He lost consciousness as a result of a blow to the head and was taken to hospital with ………