

## Unit 8

### MEDICINE, from Leaches to Lasers

#### I. Pre-Reading

1. What do you do when you are sick?

Do you visit a doctor? Do you take medicine?

2. Are there any traditional medicines in your native country?

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What do lasers, leaches, tree bark, and old bread have in common? They are all things that people use to make medicine or to help sick people feel better. Throughout history people have searched for ways to live healthier and better lives. As early as 8000 B.C., people began to experiment with methods of helping sick people. Today we have the newest technology, yet we continue to look for ways to improve medicine and our system of health care.

The history of medicine begins about 10,000 years ago. Scientists have found evidence that prehistoric people experimented with surgery in order to help sick people feel better. Around 2500 B.C., the Egyptians began to treat diseases. They used plants as medicine. They believed that people became sick because the gods were angry with them. In ancient Greece in 419 B.C., a man named Hippocrates realized that people became sick for natural reasons, not because the gods were angry. Many people think of Hippocrates as the first real doctor in history.

During the Middle Age (400-1500 A.D.), a few medical schools and hospitals opened in Europe. Treatment methods were still very simple. Sometimes doctors used leaches to remove “bad blood” from people. Doctors did not understand the human body very well.

Many very dangerous diseases, called plagues, spread through Europe at that time. Doctors could not cure these diseases, and one-quarter of the population of Europe died. Later during the Renaissance, Leonardo da Vinci made drawings of

human body, including all the muscles. These drawings helped doctors greatly. Understanding how the human body works helped doctors learn how to treat sickness and help people feel better. Modern medicine improved greatly after that time.

In the last century many very important discoveries were made in medicine. These discoveries have saved the lives of millions of people around the world. For example, in 1895 a German doctor named Roentgen developed the X-ray machine. The English scientist Sir Alexander Flemming discovered penicillin, the first antibiotic, in 1928. Antibiotics are drugs that fight diseases in the body. Flemming discovered penicillin growing in mold on an old piece of bread! Other great improvements have been made in the technology of medicine. Today doctors can save people's lives by giving them a new heart or a new kidney. Hospitals have large computers and machines that help sick people live better lives.

Medicine today is very modern, but it is also very traditional in some parts of the world. In China and other Asian countries, doctors use acupuncture, a very old method of treating sickness and pain. Acupuncture uses needles to help the human body to fight pain and disease. Doctors have used this method for thousands of years, and some still use it today. It is very successful. These doctors also use natural plants as medicine.

Some people believe that nature all of the cures for human problems. Others believe that technology is more helpful. Together, tradition and technology help people everywhere live better and healthier lives.

## **II. Working with Vocabulary**

### **A. Focus on the Reading**

Choose the best word for each sentence.

antibiotic	experiment	plagues	surgery
cure	fight	prehistoric	technology
discoveries	methods	spread	treat
evidence	natural	successful	treatment

1. As early as 8000 B.C., people began to \_\_\_\_\_ with methods of helping sick people feel better.
2. Today we have the newest \_\_\_\_\_, yet we continue to look for ways to improve medicine and our system of health care.
3. Scientists have found \_\_\_\_\_ that prehistoric people experimented with surgery to help sick people.
4. Around 2500 B.C., the Egyptians began to \_\_\_\_\_ diseases. They used plants as medicine.
5. In ancient Greece in 410 B.C., a man named Hippocrates realized that people became sick for \_\_\_\_\_ reasons, not because the gods were angry.
6. During the Middle Ages, treatment \_\_\_\_\_ were still very simple. Sometimes doctors used leaches to remove “bad blood” from sick people.
7. Many very dangerous diseases, called \_\_\_\_\_, spread through Europe at that time.
8. Doctors could not \_\_\_\_\_ these diseases, and millions of people died.
9. In the last century, many important \_\_\_\_\_ were made in medicine.
10. The English scientist Sir Alexander Flemming discovered penicillin, the first \_\_\_\_\_, in 1928.
11. Antibiotics are drugs that \_\_\_\_\_ diseases in the body.
12. Doctors in China have used acupuncture for thousands of years, and some still use it today. It is very \_\_\_\_\_.

**B. Focus on New Contexts**

Choose the best word for each sentence.

angry	evidence	nature	surgery
cure	fight	spread	technology
discovery	method	successful	treatment

1. Scientists are looking for a \_\_\_\_\_ for cancer. if they find one, they can end this terrible disease forever.
2. Last month my friend and I found a great little restaurant not far from school. It was a wonderful \_\_\_\_\_ for us. Now we go there almost every week.

3. Monica's father is in the hospital. He had \_\_\_\_\_ to fix his bad back.  
Next week he can come home.
4. Car's sister worked very hard, saved her money, and started her own business. She is very \_\_\_\_\_ now.
5. Computer \_\_\_\_\_ changes all the time. Last year I bought a new computer, and this year there is a much better one available.
6. In order to learn new words, I written them in my notebook and practice using them in conversation. What \_\_\_\_\_ do you use?
7. David likes to live in big cities. He likes the tall buildings and all the people. Anna likes to live in the country. She loves birds and trees and everything in \_\_\_\_\_.
8. I read in the newspaper that the police found some \_\_\_\_\_ at the bank that was robbed last week. The robber dropped his wallet! Now the police know his name and address.

### III. Understanding the Reading

#### A. Main Idea

Check (✓) the three main ideas of the reading.

- \_\_\_\_\_ 1. People have always searched for ways to improve life.
- \_\_\_\_\_ 2. Prehistoric people experimented with surgery.
- \_\_\_\_\_ 3. Many important medical discoveries were made in the last century.
- \_\_\_\_\_ 4. Acupuncture is a traditional way to treat sick people.
- \_\_\_\_\_ 5. Technology and tradition are both important parts of medicine and health care today.

#### B. Comprehension Questions

Answer the questions about the reading.

1. What did the Egyptians believe about sickness?

\_\_\_\_\_

2. Who was the first real doctor? Where and when did he live?

\_\_\_\_\_

3. When did medical schools and hospitals open in Europe?

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4. What are plagues?

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5. Who drew pictures of the human body, including muscles?

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6. What happened in 1895?

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7. What are antibiotics?

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8. What is acupuncture?

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### C. Details

Circle the number of the best answer.

1. Around 2500 B.C., the Egyptians began \_\_\_\_\_.

- |  |                             |
|--|-----------------------------|
| 1. to make drawings of the human body          | 2. to discover new diseases |
| 3. to treat diseases with medicine from plants | 4. to study history         |

2. The Egyptians believe that people became sick because \_\_\_\_\_.

- |                                  |                                    |
|----------------------------------|------------------------------------|
| 1. they ate plants               | 2. they were angry with each other |
| 3. the gods were angry with them | 4. of natural reasons              |

3. Hippocrates realized that \_\_\_\_\_.

1. the gods made people sick
2. people became sick for natural reasons
3. medicine comes from plants
4. he was the first doctor

4. During the Middle Ages, one-quarter of the population of Europe \_\_\_\_\_.

- |                     |                      |
|---------------------|----------------------|
| 1. died in war      | 2. died from plagues |
| 3. moved to America | 4. used leaches      |

5. In 1985, a German doctor named Roentgen \_\_\_\_\_.

- |                               |                          |
|-------------------------------|--------------------------|
| 1. invented the X-ray machine | 2. discovered penicillin |
| 3. started acupuncture        | 4. used antibiotics      |

#### IV. Word Study

##### A. Prefix

The prefix **anti-** means “against”. For example, three common medical words are *antidote*, *antibiotic*, and *antihistamine*. An **antidote** is used against poisons, an **antibiotic** works against bacteria, and **antihistamine** works against histamines, body chemicals that form because of allergies.

Guess at the meaning of the following words.

1. antisocial \_\_\_\_\_
2. antiwar \_\_\_\_\_
3. antigovernment \_\_\_\_\_
4. antiestablishment \_\_\_\_\_
5. antiseptic \_\_\_\_\_

##### B. Suffix

Many nouns in English end in **-ist**. The suffix **-ist** means “a person who does something”.

Look at the examples: A **chemist** is a person who works in chemistry.

Complete each sentence with a noun that ends in the suffix **-ist**. The words in **bold** type are related to the nouns you should use. Make the nouns plural if necessary.

1. Two teams are playing in the **final** games for the World Cup. One of these two \_\_\_\_\_ will win the competition.
2. Some country musicians are excellent \_\_\_\_\_. They can sing and play the **guitar** at the same time.
3. Pablo Picasso was a famous \_\_\_\_\_. You can see his **art** in museums all over the world.

4. Carol is interested in animals. She studies **zoology** at the university. She wants to become a \_\_\_\_\_.
5. Sumalee has studied **piano** all of her life. She is going to be a famous \_\_\_\_\_ one day.

**C. Vocabulary: a word group**

Underline one word on each line that does not belong to the others.

1. rabbits      goats      leaches      cattle
2. supermarket      restaurant      department store      bookstore
3. century      millennium      year      coast
4. difficult      uncomplicated      simple      easy
5. ocean      river      canal      island
6. disease      cure      sickness      plague
7. regular      usual      ordinary      similar

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