

美国之音科技新闻选——英语听力阅读材料

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前 言

《美国之音科技新闻选》一书是天津市科技进修学院出国预备人员英语培训班听力课教材,很受学员欢迎。根据专家建议,现将其整理出版,供广大英语爱好者学习。

本书内容新颖,适用范围广。全书都是选自 1988 年之后"美国之音"播出的世界各个国家、地区的最新科技报导。全书共分医学、健康、考古、科学与技术、农业与环境保护等六章。它适用于科技人员、医务人员、大专院校非英语专业在校学生和自学英语者阅读和听力训练。

读者通过阅读本书,既能提高语言表达能力(原文都是"美国之音"新闻记者 Nancy Stienback, David Jarnow, George Grough 等采写的),又能从中学习到科学知识及新技术。例如"腹泻"、"早上口干"等一些疾病的预防和治疗方法,制砖新方法,新型滤水器,如何烤制面包及木屑的应用等。

作为听力教材,读者通过本书的听力训练(听录音时完成课后练习), 参照生字表,最后对照原文,逐步过渡到借助字典,自己收听"美国之音" 科技新闻。

天津大学外语系英语专业副教授李孟权先生审阅了全稿。美籍教师 Dustin 先生校阅、校听了全书的内容。对其中医学、农业专业知识部分,天 津市肿瘤医院院长、中国抗癌协会副秘书长、副主任医师郝希山先生和天 津植物保护研究所陈秉恕先生给予了很大帮助,在此表示感谢。

编 者 一九八九年三月二十五日

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I MEDICINE

1. Hemorrhoids

American doctors are using some new methods to treat the common disorder —— hemorrhoids or piles. The treatments, bursts of laser on infrared light, are less painful and less costly than many traditional treatment methods.

Hemorrhoids are enlarged blood vessels and other tissue in the rectum or anus. The enlarged veins may bleed and the condition can be painful. Patients with the most severe hemorrhoids may have trouble walking, sitting or standing. Doctors say they are not exactly sure why the tissue first becomes large and swollen, but they know stress and strain can make the condition worse. It is common among women who are pregnant. It also is common in both men and women who are overweight, who do not get enough exercises, who do not drink enough water, and who must stand or sit for a long period each day.

The traditional treatment for severe hemorrhoids is a medical operation. An operation usually cures the condition permanently, but it is very painful and costly, and it takes about two weeks to one month before the patient can return to normal activities. Doctors sometimes put chemicals into less serious hemorrhoids. This reduces the size of the enlarged tissue. The chemical treatment is painless, low cost and quick, but it is not permanent. The condition can come back in a few years. Other doctors use the device that puts small rubber strings around the enlarged tissue. This cuts the blood supply to the enlarged tissue and the hemorrhoid is destroyed. The rubber string treatment is usually permanent. But it can be very painful, and sometimes leads to serious bleeding.

In one of the new treatments, doctors use a machine called an infraredprobe-coagulator. The device, the size of a small gun, produces thin bursts of in-

frared light. Doctors say a burst of infrared light only one and one half seconds long cuts the blood flow to the enlarged tissue. The hemorrhoid shrinks and dies. The treatment is fast and can be done in a doctor's office. And the patient can go home or back to work the same day.

A more powerful laser light treatment is needed for severe hemorrhoids. The laser treatment also is fast and can be done in a doctor's office. And the patient can go home an hour later. The doctors say it takes about ten days before the area has healed and the patient can return to normal activities.

I . Vocabulary

bleed

hemorrhoid (医)痔

pile 痔疮

infrared 〔物〕红外线的

扩大,扩展 enlarge

〔解〕脉管 vessel

〔解〕直肠 rectum

肛门 anus

静脉 vein 流血

肿起的 swollen

压力 stress

紧张,劳损 strain

overweight 超重

string 线

[医]探针,探测 probe

coagulator 〔化〕凝结器

shrink 收缩

治愈 heal

I . Comprehension

1. Answer the following questions

- a. What are the new methods to treat hemorrhoids mentioned here?
- b. Compare the new method mentioned here with many traditional treat-

ment methods, which is better, the new one or the old ones?

- c. What are hemorrhoids?
- d. What will happen to a person if he gets hemorrhoids?
- e. What kind of people are more likely to get hemorrhoids?
- f. What do doctors use in one of the new treatments?
- g. In what way, does the device cure hemorrhoid patients?
- h. What is needed for severe hemorrhoids?
- 2. True or false exercises
- a. Some new methods are being used to treat hemorrhoids.
- b. Hemorrhoid patients do not feel painful.
- c. Doctors know clearly about the cause of hemorrhoids.
- d. Traditionally, hemorrhoid patients are given medical operations.
- e. An operation cures hemorrhoids temporarily.
- f. The chemical treatment is not as effective as an operation to treat hemorrhoids.
- g. Small rubber string treatments also have some bad effects.
- h. The infrared-probe-coagulator treatment is fast and permanent.
- i. The area heals ten days after the laser light treatment.

2. Diarrhea

Developing countries have worked hard in recent years to reduce the problem of diarrhea. Much of the work has taken place in farming areas. But, what about cities? Diarrhea is a problem there, too.

Some cities in developing countries are growing rapidly. Poor parts are crowded. There is not enough space to build latrines. Human wastes remain in the open. They pollute drinking water and food. They cause disease, especially diarrhea.

A report called Dialogue on Diarrhea discussed the problem of diarrhea in cities. The report was published by The Appropriate Health Resources and Technologies Action Group. The Group is in London.

The report noted that as many as half the poor children in some cities suffer from diarrhea. The children get the disease often. Their health, in general, is weak. They do not grow big and strong. One of the best ways to prevent the spread of diarrhea is to have safe systems for removing human wastes.

In crowded cities, such systems may be too costly to build or where such systems are in place, children may not use them. Many people believe children's wastes are not harmful. This is false. All human wastes contain dangerous organisms. All should be kept away from food and drinking water.

"Dialogue on Diarrhea" discussed several measures to help prevent the spread of diarrhea. One is to wash your hands after touching dirty things. This is especially important for people who cook food. Bacteria move from hands to food very easily. Another measure is to clean your drinking water. Boiling the water for several minutes can kill most harmful bacteria. Another measure is to breast-feed babies as soon as they are born. Mothers' milk generally is safe from the bacteria that cause diarrhea.

When children do get diarrhea, oral re-hydration therapy is a good treatment. ORT is a simple mixture of clean water, sugar and salt. It replaces body fluids lost from diarrhea. ORT stops the effects of diarrhea, and it can prevent death from dehydration. But it is not a cure for diarrhea. As "Dialogue on Diarrhea" notes, preventing the spread of the disease is much more difficult than preventing its effects.

I . Vocabulary

diarrhea

腹泻

latrine

公共厕所

appropriate

适当的

resource

资源,办法

wastes

粪便

in place

(建)在适当的位置

... p....

organism

生物体

measure

措施

spread

传播

触摸 touch 细菌 bacteria (用)母奶喂养 breast-feed 〔化〕水合(作用) hydration 治疗 therapy 脱水 dehydration I . Comprehension True or false exercises a. Developing countries have done much to lessen the problem of diarrhea. b. There is no problem of diarrhea in cities. c. Diarrhea is caused, especially, by human wastes. d. The Approportiate Health Resources and Technologies Action Group in London published a report on diarrhea. e. Only children get diarrhea. f. Diarrhea does not affect children's health. g. There is no way to prevent the spread of diarrhea. h. Many people believe children's wastes are not harmful. i. All human wastes, including children's wastes, contain dangrous organisms. j. "Dialogue on Diarrhea" gives some suggestions of preventing the spread of diarrhea. k. To wash one's hands is only important for one who cooks food. I. It is better to breast-feed babies as soon as they are born. m. ORT is a cure for diarrhea. n. Preventing the spread of the disease is much easier than preventing its effects.

II. Fill in the blanks with the words from the reading, try not to look back at the reading.

One is to wash one's hands after ______.

Bacteria move from ______ very easily.

1

Another measure is to yo	ur
Boiling the water for several	minutes can
Another measure is to	as soon as they are born.
ORT is a simple mixture of clean	•

3. Different Ideas of a New Research

Last month, we told you about a research report that seemed to question the loss of chemistry and physics. The report was published in the British science magazine "Nature". Now an investigation has ruled that the research contained mistakes, and the findings can not be proved scientifically.

The research was done by scientists from France, Canada, Israel and Italy. They studied the reaction between a kind of white blood cell and an antibody. The scientists mixed the antibody with water. Then they added it to the write blood cells. They shook the mixture for ten seconds. This step was considered necessary. The scientists used a colored chemical to show evidence of a reaction between the antibody and the white blood cells. They said there was evidence of a reaction even when so much water was added that none of the antibody remained in the mixture. This seemed to show that the mixture somehow remenbered the presence of the antibody. The scientists did seventy experiments in different inhoratories to try to disprove the findings. Each time the results were the same. Independent scientific experts were asked to study the results to find ε mistake in the research. They found no mistakes.

"Nature" magazine published the report, but it called for another independent investigation. This time, investigators visited the main research laboratory in France. They examined the scientists' records and they observed an attempt to repeat the experiment. The investigators say they found to evidence that the scientists tried to mislead the public on purpose. But they say they uncovered major problems with the scientists' method. For example, the experiment sections failed, but these results were not included in the first report. Also, the

entists made no serious attempt to discover why the experiment worked only sometimes. When the experiment was repeated, using conditions set by the investigators, the reported effect failed to take place.

The head of the scientists has criticized the investigators. He has accused the investigators of making unnecessary demands and he says they were in too much of a hurry to make a good judgement.

I . Vocabulary

nature 自然

Israel 以色列

Italy 意大利

reaction 反应

cell 〔生〕细胞

disprove 证明·····不成立

independent 独立的,有主见的

investigator 调查者

mislead 使误解,给……错误印象

on purpose 故意地

fail 失败,不能

take place 发生 criticize 批评

accuse 指责

judgement 判断,裁判

I . Comprehension

1. Answer the following questions

- a. Where was the research report that seemed to question the loss of chemistry and physics published?
- b. What has an investigation ruled?
- c. Who did the research?
- d. What did they study?
- e. What kind of mixture was added to the unite blood cells?

- f. What did scientists use to show evidence of reaction between the antibody and white blood cells?
- g. What did scientists find after a lot of experiments?
- h. What kind of problems did another independent investigation find?

2. True or false exercises

- a. The research was done by American scientists.
- b. The results of the seventy experiments in different laboratories were not the same.
- c. The results were proved to be wrong by independent scientific experts.
- d. The head of the scientists does not agree with the investigators.

4. Hansen's Disease

Health experts say as many as 20 million people around the world may suffer from Hansen's disease. The sickness is commonly called leprosy. The sickness is named for a Norwegian scientist, Armauer Hansen. He discovered more than 100 years ago the bacteria that caused the ancient disease.

Hansen's disease progresses slowly. It first causes the skin to change color in some areas. Later, the bacteria may damage or destroy nerves. The nerves in the hands and feet are affected most. Doctors say the nerve damage may cause a few patients to develop misshapen hands or feet. But they say when this does happen, an operation usually can correct the problem.

Researchers still are not sure how the disease is spread. It sometimes appears in several members of the same family. So being with an infected person could be a cause. But most people now discovered with Hansen's disease say they were never near anyone who had the disease. Some experts believe genetic conditions may be important, that the ability to get the disease may be passed from the parents to a child, but they say the disease itself is not passed through the genes. Others say unclean living conditions or even insects could be responsible for spreading the disease.

Doctors who treat Hansen's disease say most patients can be cured now. The say that treatment for a short time can stop the disease in most patients. They say that curing leprosy is like curing tuberculosis and several other diseases. Treatments can cure it but there is a small chance that it will return. Since the 1940s, doctors have depended on the drug dapsone made from sulphur to control leprosy.

Doctors now treat the patients with a mixture of dapsone and other drugs, especially rifampin clofazimine. Researchers have developed a vaccine medicine to protect against Hansen's disease. It has been given to sixty thousand persons in Venezuela who live or work near victims of the disease. It also has been given to people in Malawi in Central Africa. The success of the vaccine, however, is not known yet, because the disease can take 5 to 10 years to develop. Scientists now are working on another vaccine that would use more of the body's natural defences to protect against Hansen's disease.

I . Vocabulary

Hansen's disease 汉森氏病;麻风

leprosy 〔医〕麻风(病)

Norwegian 挪威的

misshapen 畸形的

tuberculosis 肺结核

rifampin 利福霉素

clofazimine 克风敏;氯苯酚嗪

Venezuela 委内瑞拉

Malawi 马拉维

I. Comprehension

1. True or false exercises

- a. Many years ago, a Norwegian scientist—Armauer Hansen discovered the bacteria.
- b. The disease spreads rapidly.
- c. The patients' misshapen hands or feet can never be cured.