Exercise 5:

Examining the placebo effect

The fact that taking a fake drug can powerfully improve some people's health - the so-called placebo effect - was long considered an embarrassment to the serious practice of pharmacology, but now things have changed.

Several years ago. Merck, a global pharmaceutical company, was falling behind its rivals in sales. To make matters worse, patents on five blockbuster drugs were about to expire, which would allow cheaper generic products to flood the market. In interviews with the press. Edward Scolnick. Merck's Research Director, presented his plan to restore the firm to pre-eminence. Key to his strategy was expanding the company's reach into the anti depressant, market, where Merck had trailed behind, while competitors like Pfizer and GlaxoSmithKline had created some of the best-selling drugs in the world. "To remain dominant in the future." he told one media company, "we need to dominate the central nervous system."

His plan hinged on the success of an experimental anti-depressant codenamed MK-869. Still in clinical trials, it was a new kind of medication that exploited brain chemistry in innovative ways to promote feelings of well-being. The drug tested extremely well early on. with minimal side effects. Behind the scenes, however, MK-869 was starting to unravel. True, many test subjects treated with the medication felt their hopelessness and anxiety lift. But so did nearly the same number who took a placebo, a look-alike pill made of milk sugar or another ineit substance given to groups of volunteers in subsequent clinical trials to gauge the effectiveness of the real drug by comparison. Ultimately Merck's venture into the anti depressant market failed. In the jargon of the industry, the trials crossed the "futility boundary".

MK-869 has not been the only much-ited medical breakthrough to be undone in recent years by the placebo effect. And it's not only trials of new drugs that are crossing the futility boundary. Some products that have been on the market for decades are faltering inmore recent follow-up tests It's not that the old medications are getting weaker, drug developers say It's as if the placebo effect is somehow getting stronger The fact that an increasing number of medications are unable to beat sugar pills has thrown the industry into crisis The stakes could hardly be higher. To win FDA approval, a new medication must beat placebo In at least two authenticated trials. In today's economy, the fate of a well-established company can hang on the outcome of a handful of tests.*

Why are fake pills suddenly overwhelming promising new drugs and established medicines alike? The reasons are only just beginning to be understood. A network of independent researchers is doggedly uncovering the inner workings and potential applications of the placebo effect A psychiatrist. William Potter, who knew that some patients really do seem to get healthier for reasons that have more to do with a doctor's empathy than with the contents of a pill, was baffled by the fact that drugs he had been prescribing for years seemed to be struggling to prove their effectiveness Thinking that a crucial factor may have been overlooked, Potter combed through his company's database of published and unpublished trials—including those that had been kept secret because of high placebo response. His team aggregated the findings from decades of anti depressant trials, looking for patterns and trying to see what was changing over time. What they found challenged some of the industry's basic assumptions about its drug-vetting process Assumption number one was that if a trial were managed correctly, a medication would perform as well or badly in a Phoenix hospital as in a Bangalore dinic. Potter discovered, however, that geographic location alone could determine the outcome. By the late 1990s, for example, the anti-anxiety drug Diazepam was still beating placebo in France and Belgium But when the drug was tested in the U.S. it was likely to fail. Conversely, a similar drug. Prozac, performed better in America than it did in western Europe and South Africa. It was an unsettling prospect FDA approval could hinge on where the company chose to conduct a trial.

Mistaken assumption number two was that the standard tests used to gauge volunteers' improvement in trials yielded consistent results. Potter and his colleagues discovered that ratings by trial observers varied significantly from one testing site to another. It was like finding out that the judges in a tight race each had a different idea about the placement of the finish line.

After some coercion by Potter and others, the National Institute of Health (NIH) focused on the issue in 2000, hosting a three-day conference in Washington, and this conference launched a new wave of placebo research in academic laboratories in the U.S. and Italy that would make significant progress toward solving the mystery of what was happening in clinical trials.

In one study last year. Harvard Medical School researcher Ted Kaptchuk devised a clever strategy for testing his volunteers' response to varying levels of therapeutic ritual The study focused on a common but painful medical condition that costs more than $40 billion

a year worldwide to treat. First, the volunteers were placed randomly in one of three groups. One group was simply put on a waiting list; researchers know that some patients get better just because they sign up for a trial. Another group received placebo treatment from a clinician who declined to engage in small talk. Volunteers in the third group got the same fake treatment from a clinician who asked them questions about symptoms, outlined the causes of the illness, and displayed optimism about their condition.

Not surprisingly, the health of those in the third group improved most. In fact, just by participating in the trial, volunteers in this high-interaction group got as much relief as did people taking the two leading prescription drugs for the condition. And the benefits of their "bogus" treatment persisted for weeks afterward, contrary to the belief—widespread in the pharmaceutical industry- that the placebo response is short-lived.

Studies like this open the door to hybrid treatment strategies that exploit the placebo effect to make real drugs safer and more effective. As Potter says. "To really do the best for your patients, you want the best placebo response plus the best drug response" adapted from Wired Magazine

** The Food and Drugs Administration (an agency in the United States responsible for protecting public health by assuming the safety of human drugs)*

Source: Complete IELTS Band 6.5-7.5

Questions 1-4

Choose the correct letter A, B, C or D.

1 Which of the following is true of William Potter's research?

A It was based on recently developed drugs that he had recommended

B It included trial results from a range of drugs companies

C Some of the trial results he investigated had not been made public

D Some of the findings were not accepted by the drugs industry

2 What did William Potter's research reveal about the location of drugs trials?

A The placebo effect was weakest in the US

B Results were not consistent around the world

C Results varied depending on the type of hospital

D The FDA preferred drugs to be tested in different countries

3 What does the tight race refer to in line 80?

A the standard tests

B consistent results

C ratings by trial observers

D testing sites

4 What significant discovery was made by Ted Kaptchuk?

A The effects of a placebo can last longer than previously thought

B Patients' health can improve while waiting to undergo a trial

C Patients respond better to a placebo if they are treated by the same clinician throughout the trial

D Those conducting a placebo trial need to know the subjects' disorder well