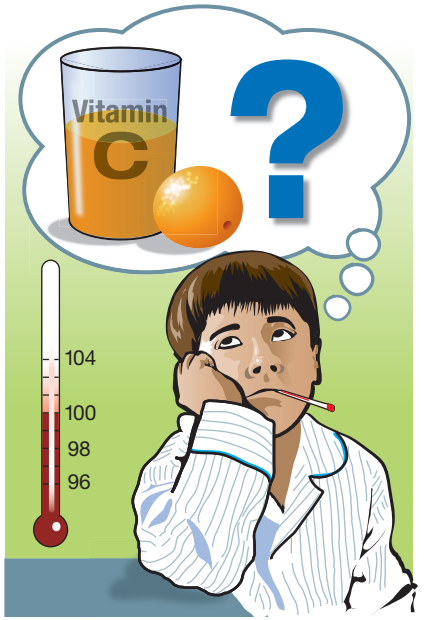
HEALTH CONNECTION

Testing the Power of Suggestion

Have you ever bought one brand of a common item instead of another, just because you heard a name in an ad? We all do that. Ads sometimes influence us through the power of suggestion. We recognize the name of the product. We may not be sure why. And then we buy the product.

When the power of suggestion occurs in medicine, it is called the "placebo effect." A placebo is a substance that has no healing properties. Yet this same substance causes a patient's condition to improve. Why? Because he or she believes it has the power to do so. This is the placebo effect.



Is it real? One way to try to find out is through a scientific experiment. This will test the hypothesis. A hypothesis is an idea that is based on evidence and that, most importantly, can be tested. In this case, the hypothesis is that the placebo effect is real. People who take a placebo for an illness will get well.

Let's imagine an experiment that will test the placebo effect. The hypothesis will be tested on a group of people, or "subjects." All of the people in the experiment need to believe that they are receiving the same treatment for the same problem. They need to believe that they are all being treated in exactly the same way. This is called a "blind" test. The subjects do not know if they are receiving a medicine or other treatment or a placebo.

For our experiment, let's assume our subjects are concerned about catching a cold. They all believe that taking high doses of vitamin C helps prevent colds. Some of the subjects will be given a placebo, but they will believe it is vitamin C. If the placebo effect is real, everyone in the experiment should catch fewer colds. It should not matter if a subject is taking vitamin C or not.

Test the hypothesis

Half of the subjects will receive vitamin C pills. The other half will take pills that look the same but are placebos. For example, they might be made of powdered sugar.

To test the effect, all of the subjects take the "vitamin" pills for a month. We record how all of them respond to the pills. This becomes our experimental data. At the end of the experiment, which group caught fewer colds? If there is no difference, the placebo effect may be real.

To test the hypothesis further, we would also follow up. When the experiment ends and the powdered sugar is no longer being given to half of the test subjects, do the number of colds caught by the subjects go up?

If so, then we have more evidence to support our hypothesis. What were the results when the subjects believed they were taking vitamin C? How do those results compare with what happened when they stopped taking the pills? This is the point of comparison.