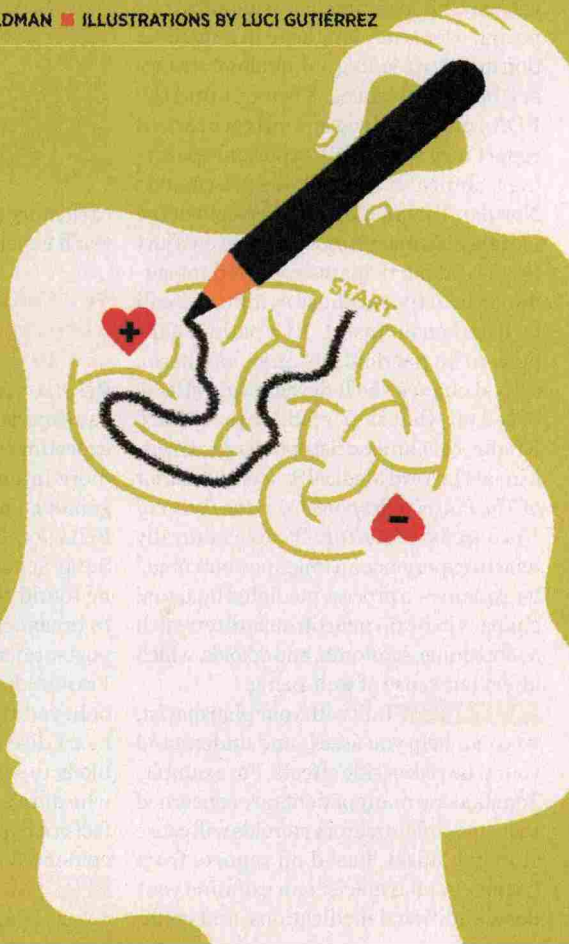


# Mind Games

## THAT HELP YOUR HEALTH

The brain has the power to heal the body, and it also has the power to harm. New research reveals why, and how to tip the balance back in your favor. ■ BY LESLIE GOLDMAN ■ ILLUSTRATIONS BY LUCI GUTIÉRREZ

IT'S A WELL-RESEARCHED fact that your thoughts strongly influence your well-being. For instance, consider the placebo response: A pill makes you well just because you *believe* it will—even if the pill (unbeknownst to you) is made only of sugar. Unfortunately, your brain can wield an equally negative influence. A classic example: You feel achy and sweaty from the flu you “caught” after getting an influenza shot (even though the virus used in the vaccine is dead). Another: You read about tainted produce and immediately get a stomachache. This so-called “nocebo effect” also trades on the power of suggestion, duping you



into thinking you're ill when you're perfectly fine. Here's how the nocebo effect typically exerts its influence—and how you can outsmart it.

### **YOU READ** about potential side effects on your prescription bottle and develop them.

WHILE YOU'RE SMART to stay informed, you may induce or intensify side effects by poring over scary language in a medication insert or reading online about strangers' bad experiences. Keep in mind the FDA requires drug manufacturers to report *any* side effect experienced during a clinical trial, explains pharmacist Norman Tomaka, CRPh, president of the Florida Pharmacy Association. Even if just 1% of trial participants reported insomnia or heartburn, those symptoms will be listed on an insert. "If a patient happens to be particularly anxious, there's a good chance she'll develop side effects based on what she's read," says Richard Kradin, MD, an associate professor of medicine at Harvard Medical School and author of *The Placebo Response and the Power of Unconscious Healing*. "People naturally tend to experience an imagined outcome," he explains—a process mediated by actual changes in brain neurotransmitters such as dopamine, serotonin, and opioids, which affect our sense of well-being.

**OUTSMART IT** Talk with your pharmacist, who can help you assess and understand your true risk of side effects. For example, Tomaka says many patients are concerned that anti-inflammatory steroids will cause stomach upset, based on reports from friends. A pharmacist can examine your dose, additional medications, and medi-



cal history and predict the likelihood that you'll experience the same.

### **YOU FEAR** a slow recovery after a procedure, and it becomes a self-fulfilling prophecy.

PESSIMISTIC THOUGHTS can jump-start a bad experience. "If you go in for a root canal expecting the worst, pain can become even more intense," explains Guy H. Montgomery, PhD, director of the Integrative Behavioral Medicine Program at Mount Sinai School of Medicine. In one study, he found that emotional distress prior to breast cancer surgery contributed to postsurgical nausea and pain. And in the Framingham Heart Study, women who believed they were destined to develop heart disease were almost 4 times more likely to die of a heart attack than those who didn't—despite having the same risk factors, explains Elaine D. Eaker, ScD, an epidemiologist who led the study.

**OUTSMART IT** Focus on a positive outcome. Diagnosed with a bulging disk?

Seek advice from back-pain patients who improved through yoga or physical therapy. And elevate your expectations by identifying a stress-relieving activity that may work for you. Hypnosis, for one, reduces stress before surgery, says Montgomery, but anything that calms you down, such as meditation or exercise, can be helpful.

### **YOU HEAR about a health scare in the news and think you're next.**

IF YOU'VE EVER read a lice-outbreak bulletin from your child's school and then started itching or heard about tainted tomatoes after eating a BLT and felt queasy, you've experienced this kind of communal nocebo effect. "At any point, we all have symptoms that we typically ignore—simple things like an itch or ache," says Robin DiMatteo, PhD, a professor of psychology at the University of California, Riverside. But when something like a salmonella outbreak is in the news, our awareness of otherwise benign symptoms is heightened. Blame it on group psychology: Thoughts and emotions, like illnesses, are contagious, DiMatteo says. That's why you may mistakenly attribute your itchy skin to "the rash" that's going around.

**OUTSMART IT** Assess your symptoms rationally. Of course, you need to monitor your environment so you don't ignore a real problem (like sending your child for a sleepover at the home of a friend with lice). But instead of chalking up a stomachache to tainted produce, ask yourself if you felt ill already. And during any kind of outbreak, practice good preventive measures, such as washing your hands and avoiding sick friends—these positive moves will not

only protect your immunity but also help banish a fatalistic sensibility.

### **YOU THINK the color, dose, or cost of a pill makes it inferior, rendering it less effective.**

RESEARCH SHOWS that people think red, orange, and yellow pills are more powerful than blue or green ones, and that taking two pills 5 times a day works better than taking one twice a day.

Price matters too: In a recent study, healthy volunteers received electrical shocks, followed by a pill they thought was similar to codeine but was really a placebo. Half of the people were informed the drug was \$2.50 per pill; the others were told it had been discounted. While nearly 85% of the "full price" recipients reported pain relief, only 61% of the "discount" group did. Study author Dan Ariely, PhD, a professor of behavioral economics at Duke University, chalks this up to the common yet unconscious belief that cheaper products are less effective than their costly counterparts: "When people pay less, they expect less, and the body does not secrete the same amount of opiate-like hormones as it normally would when anticipating medicine." Those hormones help the drug work; in their absence, you get less relief.

**OUTSMART IT** Acknowledge your preconceived—and false—notions about packaging and price points. Or ask your doctor why she thinks the generic she prescribed will treat you as well as the pricey version. The next time you consider asking for a brand name even though your doctor says the reduced-cost medicine is as potent, save yourself the argument—and some money—and feel better just as fast. ■