

better. And if your doctor is a highly acclaimed specialist, or your prescription is for a new wonder drug of some kind, you feel even better. But how does suggestion influence us?

IN GENERAL, TWO mechanisms shape the expectations that make placebos work. One is belief—our confidence or faith in the drug, the procedure, or the caregiver. Sometimes just the fact that a doctor or nurse is paying attention to us and reassuring us not only makes us feel better but also triggers our internal healing processes. Even a doctor's enthusiasm for a particular treatment or procedure may predispose us toward a positive outcome.

The second mechanism is conditioning. Like Pavlov's famous dogs (that learned to salivate at the ring of a bell), the body builds up expectancy after repeated experiences and releases various chemicals to prepare us for the future. Suppose you've ordered pizza night after night. When the deliveryman presses the doorbell, your digestive juices start flowing even before you can smell the pie. Or suppose that you are snuggled up on the couch with your loved one. As you're sitting there staring into a crackling fire, the prospect of sex releases endorphins, preparing you for what is to come next, and sending your sense of well-being into the stratosphere.

In the case of pain, expectation can unleash hormones and neurotransmitters, such as endorphins and opiates, that not only block agony but produce exuberant highs (endorphins trigger the same receptors as morphine). I vividly recall lying in the burn ward in terrible pain. As soon as I saw the nurse approaching, with a needle almost dripping with painkiller, what relief! My brain began secreting pain-dulling opioids, even before the needle broke my skin.