

My Laughter Rx For Your Heart

BY MICHAEL MILLER, MD, WITH CATHERINE KNEPPER

FROM THE BOOK *HEAL YOUR HEART*

ONE OF MY FAVORITE moments as a physician occurs when, with a very somber look, I inform patients that there's one thing they absolutely must do in order to make a successful recovery after a cardiac event: Go home and laugh until they cry.

You see, we now know that there's far more to maintaining heart health and reversing heart disease than diet, exercise, and cholesterol levels. The latest research indicates that stress, and an inability to deal with it, is a direct contributor to heart disease. For example, a study involving nearly 250,000 people found that anxiety was associated with a 26 percent increase in coronary heart disease over an 11-year period.

Anger and hostility rank at the top of the list of heart-harmful emotions. Harvard Medical School researchers recently found that 40 percent of patients who suffered a heart attack reported significant anger within the previous year, and roughly 8 percent of that group reported that they felt



rage within two hours of heart attack symptoms.

But while studies reveal a great deal about the harm that negative emotions deliver to the heart, they also clearly demonstrate the amazing healing power of positive emotions. In my 25 years as a cardiologist performing clinical trials and treating patients, I've seen firsthand how we can harness optimism, confidence, laughter, social connections, and relaxation to help our hearts get and stay healthy. ➔

Laugh Hysterically

Deep belly laughter triggers the release of endorphins, which activate receptors in our blood vessels' linings that signal the production of nitric oxide. This powerful chemical causes blood vessel dilation, increases blood flow, reduces vascular inflammation and buildup of cholesterol plaque, and decreases platelet stickiness, which lowers the risk of blood clots.

In an early study, my team saw that people with heart disease were 40 percent less likely to use humor in an uncomfortable situation, such as having a waiter spill a drink on them, than people with healthy hearts. In another study, when we asked people to watch a clip from *Saving Private Ryan* or *There's Something About Mary*, we found that participants' blood vessels were narrowing by up to 50 percent during the stress-inducing clip, while vessel dilation in people who watched a funny clip increased 22 percent. After just 15 minutes of laughing, volunteers got the same vascular benefit as they would from spending 15 to 30 minutes at the gym or taking a daily statin.

Cue the Music

Medical science is now proving what people have known for hundreds of years: that music is deeply healing. In one study, researchers found that listening to music

25 minutes daily for four weeks resulted in a 12 mm Hg reduction in systolic blood pressure (the top number) and a 5 mm Hg decrease in diastolic blood pressure (the bottom number). Results like these are equivalent to the benefit of taking a strong blood pressure medication.

The calming effect of music is so powerful that listening to relaxing music before cardiac surgery was more effective at reducing stress than a sedative medication. And a group who listened to music after surgery fared better than patients who received the sedative. One theory is that music acts directly on the body's autonomic nervous system, which is responsible for heart rate and blood pressure.

Cuddle Up

During childhood visits to the doctor, I remember feeling that everything would be fine when my pediatrician would place his hand on my upper shoulder as he listened to my lungs. Early in my training, I did the same thing to my patients. Several studies support the idea that interpersonal touch has important heart-health benefits. In one study, women who received frequent hugs from their partner showed reduced heart rates and blood pressure as well as higher levels of the powerful neurotransmitter oxytocin, which leads to blood vessel dilation. **R**

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