



Stress, Your Health, and Yoga

by Timothy McCall, MD

As I travel around the globe teaching workshops on yoga therapy—the use of yogic tools from postures to meditation to help people heal—I am struck by what an enormous problem stress-related illness is. Everywhere I go, from ultra-modern cities like Stockholm where I've spent the last week, to less developed nations, people young and old are suffering the health consequences of their increasingly busy schedules and sometimes even busier minds.

Surprisingly, in this time of widespread tension, unrest and economic insecurity, most doctors still seem not to fully appreciate the deadly consequences of out-of-control stress or how much something like yoga can help. In medical school we were taught about the connection of stress to such health problems as duodenal ulcers, migraine headaches and irritable bowel syndrome. But scientific evidence is increasing indicating that stress can be a factor in life-threatening conditions from heart attacks to depression to hip fractures. Ironically, doctors may be among the most at-risk members of our society, due to their endemic stress and lack of understanding of simple non-drug tools like yoga that can fight it.

When scientists talk about the stress-response system, they are referring to a complex web of events that ramp the body up to deal with an acute crisis. The sympathetic nervous system—the so-called “fight or flight” system—kicks in, which among other things increases blood flow to the large muscles that help you defend yourself or run away from a physical threat. Stress hormones like adrenaline and cortisol are also released. In response, blood pressure and heart rate go up and breathing quickens. Blood sugar and other energy stores are mobilized to fuel whatever challenge you are about to face. In case you are injured, your blood begins to clot more easily. In crisis mode, the body shunts energy away from restorative functions like digestion and reproduction, mediated by the parasympathetic nervous system, which you can think of as the “rest and digest” system.

This built-in stress-response system is well-adapted to acute crises but can lead to all kinds of problems if it doesn't get switched off after the acute crisis passes. Blood clots increase the risk of a heart attack or a stroke, as does the high blood pressure and elevated blood lipids that stress contributes to. Elevated levels of cortisol are associated with everything from major depression to osteoporosis to overeating and weight gain (and the many problems that result from that). And while the immune system initially gets stronger during an acutely stressful event, it starts functioning less well if the stress goes on too long, raising the risk of serious infections and, as at least some evidence suggests, autoimmune diseases.



The problem is that the ancient human stress-response system isn't so well adapted to mostly non-physical modern world stressors like work deadlines, traffic jams, and even abstract ideas about whether you are happy or fulfilled. If you repeatedly mull these problems over, the chemical and physical changes that were designed to deal with an acute threat to physical health—and which are then supposed to shut off when the threat is removed—remain activated. Such mental tape loops can thus turn abstract worries into concrete threats to health and even to life itself.

Yoga is arguably the best overall system of stress reduction ever invented. More and more evidence suggests the practice can help treat and prevent a wide range of health problems (for details see [my web site](#)). Beyond the harmful effects on the body, feeling stressed is a drag. It can make you feel anxious, preoccupied, full of dread.

Yoga can—sometimes within minutes—quiet down an overactive stress-response system. One of the great insights of the ancient yoga masters is that when you move and breathe with awareness, it calms your nervous system and slows down the tape loops in your mind. When your inner monologue slows, most people experience a sense of peace, relaxation and a feeling of being centered.

At first, this only happens when you are doing yoga and perhaps for a short time afterwards. But if you maintain a steady practice, more and more you become aware of and can tap into the tranquility you find in yoga throughout the rest of your day. Over time, you can actually make your nervous system less reactive to minor stressors, and less likely to get knocked off balance by life's inevitable ups and downs. You learn that you can be in a difficult situation, but nonetheless keep the breath slow and deep, and the mind both relaxed and attentive.

This sense of inner calm can make you feel more grateful for what you have, appreciate the beauty around you (which you otherwise might not have noticed) and help you realize that some of the stuff you're getting bent out of shape about may, ultimately, not be very important. And that may be one of the best stress reducers of all.



Timothy McCall, MD teaches yoga therapy seminars worldwide. He is a board-certified internist, the medical editor of *Yoga Journal* and the best selling author of [Yoga as Medicine](#). This article originally appeared on the [Yoga For Health Aging Blog](#). Download articles and view Timothy's teaching schedule at [DrMcCall.com](#)