



SF Medicine Interview with *Yoga Journal's* Medical Editor Timothy McCall, MD

Trained in primary care internal medicine, *Yoga Journal's* Medical Editor and Oakland resident, Dr. Timothy McCall, gave up his medical practice ten years ago and began a full-time investigation of the health benefits and therapeutic potential of yoga. This culminated last year with the publication of the critically-acclaimed bestseller *Yoga as Medicine: The Yogic Prescription for Health and Healing* (Bantam). He recently returned from two months in India, his fourth visit in the last six years.

Q: When you talk about yoga, you don't just mean the stretching poses, do you?

A: The physical poses are really only part of a much more comprehensive system that includes breathing techniques, meditation, philosophical ideas and even community service. But in the US most people start with the poses, and may or may not add other yogic tools later. One thing that's nice about yoga is that you can take the parts that serve you and discard the rest. You don't want to chant Om? Don't chant it. There are so many styles of yoga, and so many ways the practices can be modified, that almost anyone's needs can be met. I've seen yoga adapted for people in wheelchairs or those who are bedridden. All that's required is consciousness.

Q: How did you get into yoga?

A: Yoga is just one of those things I'd heard about and decided to try. In 1995, a friend recommended a particular yoga center near where I was living in Cambridge, Massachusetts. Although I had no idea of who she was at the time, my teacher, Patricia Walden, turned out to be one of the most highly regarded in the US. She does Iyengar yoga, a style that aims for precise anatomical alignment in the poses. Because it's more conceptual and less new-age than other styles, it was a good place for skeptical scientist like me to start. I took to it early on, even though I'm about as far from a natural at it as can be.

Q: How did you go from taking classes to making yoga the focus of your work?



A: From the beginning, I was hearing all kinds of stories about yoga’s health benefits. One student told me she’d had terrible back pain for years and now it was gone, or I’d hear things like “this is a good pose for sinus problems.” And then there was my own experience. Before yoga, I had frequent insomnia, lousy posture, chronic upper back tension, intermittent migraines, all of which improved greatly. Psychologically, I became more resilient; little stuff wasn’t getting to me the way it once had. So I got curious, starting tracking down all the research I could find, and eventually traveled to India to visit research institutions and major yoga therapy centers. Meanwhile, the changes in medicine, particularly getting so much less time with each patient, was making practicing more stressful and less rewarding for me. My first book had been successful, I was getting lots of writing work for magazines, had a gig on public radio, and in 1997, I had a thought: What if I stopped practicing and pursued this stuff full time? In ten minutes I knew it was right, and I’ve never looked back. The funny thing is my interest in yoga therapy has brought me back to something that feels a lot like patient care. And I like that.

Q: Why did you write *Yoga as Medicine*?

A: No one had written a comprehensive book on the health aspects of yoga. My research and direct experience has convinced me that yoga is more than just an interesting form of exercise or great stress reduction technique, and certainly more than just a benign way to elicit the placebo response. By poking around for several years, I found a surprising amount of clinical research on yoga that I thought people would be interested in. I also figured that the perspective of a physician who is also a dedicated yoga practitioner would be useful. And even though the book is aimed at the general public, in the back of my mind I was also addressing physicians.

Q: Why are you so interested in reaching doctors?

A: The primary reason is that I think yoga is something that could help the majority of patients. While I don’t think yoga by itself is a cure for much, there’s almost nothing it can’t help. Studies suggest, for example, that women who practice gentle yoga as they go through conventional breast cancer treatments have less nausea, fatigue and other side effects. Yoga appears to benefit people with heart disease, type 2 diabetes, asthma, hypertension, and is particularly useful for a variety of “lifestyle diseases” and psychosomatic illnesses that don’t necessarily respond that well to medicine’s usual ministrations.



Finally as someone who understands science and patient care, I'm hoping to be able to reach physicians by talking about yoga in a language they understand and can relate to. I talk much more about the autonomic nervous system and cortisol levels than about prana and chakras.

Q: How does yoga work from a medical standpoint?

A: Yoga has been shown in hundreds of studies to have numerous of salutary effects. Research suggests it improves strength, flexibility, balance, and even coordination and reaction time. It lowers cortisol levels, reduces both systolic and diastolic blood pressure, lowers total and LDL cholesterol levels, and improves immune function (e.g. heightening antibody response to influenza vaccination). It improves the functioning of the autonomic nervous system as indicated by better heart-rate variability and baroreceptor sensitivity. It helps patients drop weight, probably more by increasing awareness, improving habits, and lowering cortisol, than by burning calories per se. It has been shown to improve mood and other measures of psychological health. My guess is that yoga works by invoking dozens of these mechanisms simultaneously, likely with additive benefits.

Q: Some gurus claim that yoga can cure any disease.

A: Those claims should be taken with a big grain of salt. In my role as the medical editor of Yoga Journal, I'm constantly riding teachers about how they talk about yoga. In an effort to make yoga sound more legitimate, they use scientific language, but often in an imprecise or incorrect way, or make unsubstantiated assertions. I try to get teachers to stop claiming that yoga "removes toxins" or "balances the endocrine system," since I don't even know what those terms mean, and to stick to what we actually know. That said, if you let the pronouncements of yoga's most extreme proponents, or the hyperbolic claims of some of the ancient texts, scare you off, you'll miss the chance to learn about something that's a surprisingly effective adjunct to medical care.

Q: How safe is yoga? Some physicians are seeing quite a few injuries.

A: Yes, that's unfortunately true. I think the majority of yoga injuries could be prevented if people didn't do practices and classes that are too advanced for them, if they learned to not push themselves so hard, and if teachers, students, and their doctors were more aware of contraindications. People with serious illnesses should not be doing most of the classes that are offered in gyms.



They are too strenuous, and most teachers in gyms aren't trained to deal with students with serious conditions, and many aren't sufficiently aware of contraindications.

To cite just one example, students with retinal disease or poorly-controlled hypertension shouldn't be going upside down into headstands and shoulderstands. That's part of why I put so much focus on yoga safety and contraindications in *Yoga as Medicine*. Rather than attending a random class, I recommend that those with serious illness try to consult an experienced yoga therapist who can tailor a program to their specific needs.

Q: So there's a difference between yoga therapy and taking a yoga class?

A: Yes. Group classes tend to be a one-size fits all proposition, but those who are ill need to have some practices modified or to skip them entirely, and this isn't possible in most group classes. As I've traveled through the US and India observing the work of many of the world's top yoga therapists, I've noticed that they all personalize their prescriptions. The group yoga class is actually an invention of the last 50 years or so. In the old days, the guru always designed a specific practice for each student, and then modified it as the student's abilities and needs changed. And this is precisely what a good yoga therapist does. For those with less serious conditions or those looking for a little exercise or stress reduction, group classes can be great, but they aren't right for everyone.

Q: How can physicians help protect their patients?

A: Having some idea of the different styles of yoga would be a start. Bikram and hot yoga are vigorous styles done in a room heated to more than 100 degrees F. Asthanga, vinyasa flow, and power yoga are similarly challenging practices that require a fair amount of fitness and flexibility. These stronger styles attract a lot of weekend warriors, though, and that's where a lot of the injuries are coming from. On the other hand, styles such as Integral, Viniyoga, Kripalu and "gentle" hatha yoga are much milder and less likely to cause injuries. Iyengar and Anusara are two styles that are intermediate in intensity, and both pay a lot of attention to aligning muscles and bones well, which may keep the injury rates down. The key to safe yoga is good instruction, and the very best teachers are themselves long-time practitioners.

Q: What should a physician do when patients indicate that they would like to try yoga?

A: Try to get some idea of the practice they hope to pursue. You might suggest patients bring in a book illustrating the kind of yoga they're contemplating, to help gauge its appropriateness. A lot of avoiding contraindications is just applying common sense. As a doctor, I always try to assess the risk-benefit equation.



If a particular pose or breathing practice is questionable, there's always something else in yoga that can be substituted, so I try to err on the side of safety. If the patient is interested in yoga therapy and can afford it, often a private or small group consultation with an experienced teacher the best and safest way to go (see the International Association of Yoga Therapists at www.iayt.org). Ideally, the patient leaves the yoga therapist with a prescription for which poses and other practices to do on their own. Even though most people equate yoga with taking a class, in terms of effectiveness and therapeutic utility, a steady home practice appears ideal. My teacher Patricia always used to say 15 minutes a day beats a longer session once a week. I suggest people try to fit a few poses or breathing practices into the cracks of their day.

Q: With so much on their plates, why should physicians pay attention to yoga?

A: Yoga done well is healing, but done improperly can cause harm. Millions of patients are already practicing yoga, whether they are discussing it with their docs or not. And although physicians may not be sensing it yet, yoga therapy is growing more rapidly than yoga itself. According to the 2008 *Yoga Journal* survey, the percentage of people coming to yoga for health reasons has increased almost ten-fold in the last 4 years, up from about 5 to 50 percent. In the same survey, 45 percent of adults agreed that yoga would be beneficial if they were undergoing treatment for a medical condition. Baby boomers, in particular, now developing various chronic diseases, are looking for alternatives that are safe, cheap, natural, self-directed and effective, and yoga fits that bill perhaps better than anything else out there. With a little good direction from physicians, patients can do it more safely. Yoga is also something a lot of stressed-out docs would enjoy and benefit from. I certainly have.

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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 in *Integral Yoga Magazine*. You can download a PDF of this article and other articles and view his teaching schedule at DrMcCall.com.