

PRESERVE YOUR CURVES

Spinal Freedom with Yoga and Pilates



DR. KHALILI

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Praise for
Preserve Your Curves:
Spinal Freedom with Yoga and Pilates

“As a Yoga Teacher, I have to acknowledge that for a lot of us Westerners, yoga is about looking good. Many in the Western world have not yet understood the real meaning of yoga: the union with the SELF. Instead, I see today’s yoga approached as if it was a sport. Asanas (postures) are only one aspect of yoga. For me, it is all about the inner world—not so much how we look as how we feel. I found Kevin’s work very much in alignment with my theory. Each one of us is different and unique. Each yoga student has to learn first and foremost to listen and tune in to his or her own body.

With Kevin’s work, this tuning inward becomes very real. Looking into our inner body through an X-ray allows us to relate to the spine in a whole new way. Seeing the structure of our spine, versus just feeling it, allows a new dimension of relating to it. Kevin’s modifications for some yoga asanas are wonderful. They allow everyone to take part in yoga without harming themselves.

I am very fortunate to have worked with Kevin on and off for the last ten years. I learned a lot from his approach and was able to transfer a lot of it into my teachings. He treated many of my yoga students with pre-existing conditions. The progress they made in their health and healing is astonishing. Kevin’s approach gives us the opportunity for a fresh understanding of ourselves. We live in a very modern world, and I feel it is time that we unite the old with the new world on all levels by combining thousands of years of yoga tradition with the technology of today. It does not have to be an either/or approach. I am hopeful that our yoga community and beyond will benefit from Kevin’s contribution. He invites us to go a little deeper, and after all, isn’t that what yoga is all about?”

—Ma Dhyani Siddhi
Kundalini, Naam & Prenatal Teacher

“Dr. Khalili’s book sounds an overdue alarm bell to the fitness industry, as well as to the practice of chiropractic medicine. We would do ourselves well to heed it. His book offers exercise modifications based on empirical facts—one’s spinal X-rays. As a Pilates instructor, I trained to assess spinal structure based on gait observation and spinal movement until I found Dr. Kevin Khalili. Like most chiropractors, his underlying theory of healing is based on the concept of “ideal spine.” Unlike most chiropractors, his daily practice focuses on the person’s actual spinal situation. Insisting on spinal X-rays helps him determine which exercises contribute to back pain and which aid in the mitigation or even elimination of it. In my case, after developing a degenerative lumbar disc while competing as a gymnast for 15 years, I had been told flexion of the lumbar would alleviate the pain. While serving to relieve my pain, the flexion exacerbated it. Once I moved toward more passive extension work (thanks to Dr. Khalili’s assessment of my spinal X-rays), my back pain virtually disappeared. In my practice today, I always insist that my clients with significant issues receive a proper diagnosis based on X-ray analysis (www.idealspine.com). What an invaluable tool Dr. Khalili has given me, and all of us!”

—Kiran DeWilde, MA
Certified Pilates & GYROTONIC™ Instructor

“In this book, Dr. Khalili points out several body positions that many people find themselves in—either during the day while sitting at a computer for hours, or at night sleeping in improper positions—and the potential problems that can develop. He clearly explains with numerous references why these positions contribute to improper spinal alignment and poor posture, including rounded shoulders and decreased neck and lower back curves.

Why should exercise duplicate these positions and possibly contribute to worsening any problems? It’s so common to see people performing exercises with their head and neck pulled forward, their shoulders rounded forward, and unnecessary stress placed on their lower back—all in the name of achieving “core strength.” In my Pilates practice, I have found it easy to either modify or eliminate certain exercises to emphasize a more neutral spinal curve and contribute to an ideal posture.

Dr. Khalili also stresses the importance of obtaining spinal X-rays to ensure one’s exercise choices are safe for them. I can speak from personal experience that once he examined my spinal X-rays, it changed my Pilates practice. With the information gained through X-rays, I have been able to specifically tailor a Pilates workout to meet the needs of my body. X-rays should be an essential component of everyone’s health and fitness routine. I found that this new way of thinking just makes sense.”

—Cherie Kubel, MBA
Pilates Instructor

“How fortunate we are to have this wealth of knowledge offered so genuinely by Dr. Kevin Khalili! His extensive research and expertise have propelled me to become a more conscious yogi.

Having been conceived during a yoga retreat at Oxford University (my father taught yoga at my elementary school), it’s no surprise that I embrace and have a fondness for everything yoga embodies, including both lifestyle and asanas (poses). However, there were always a few poses that I found difficult or painful.

Dr. Khalili explained to me the uniqueness of each person’s body. I agree that this uniqueness when beginning a yoga practice must be considered to avoid injury or long-term imbalance. Dr. Khalili demonstrates alternative poses or modifications to your favorite poses so you can still enjoy your yoga practice.

How blessed I am to have become aware of my unique body structure through spinal X-ray images and personal evaluation by Dr. Khalili! I can now practice yoga with heightened consciousness and pleasure knowing that I am protecting myself from injury and pain.

Many thanks to Dr. Khalili!!”

—*Zoe Reheem, RDH*
Yoga Instructor

“Kevin Khalili offers a valuable and well-researched guide for how to continue a Yoga or Pilates practice that will support and nourish your body throughout your entire life. He brings decades of expertise as a thoughtful and experienced chiropractor to his understanding of the body mechanics used in exercise and posture. One of the challenges we face today is the fact that our everyday movements (sitting at a desk, commuting, or even sleeping in a way that is poorly or overly supported) can weaken or strain our physical body. Because of this, the very practices that are gaining in popularity today can both hurt and heal, and Dr. Khalili offers insight into how to choose instructors and classes and how to modify to allow the poses to support the body. His book is a valuable resource for teachers and students of both Yoga and Pilates. It should be behind the front desk and frequently referred to in every studio, gym, therapy clinic, and community center. His work is valuable, and I am grateful that he is sharing it with the world in his new book. I recommend it highly for everyone with a movement practice (and that should be all of us!).”

—*Felicia Marie Tomasko, RN*
Editor in Chief, LA YOGA Ayurveda and Health Magazine

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A portion of the proceeds of this book will be donated to CBP Nonprofit, Inc. to help continue their scientific research on the structural rehabilitation of abnormal human posture. I would also like to thank Deed Harrison, DC, and the late Don Harrison, PhD, DC, not only for inspiring me but also for their invaluable contributions to the chiropractic profession.



INTRODUCTION

Americans are gradually coming to accept the fact that robust health requires us to be proactive. In our quest for health and longevity, we brush and floss our teeth, eat organic foods, take vitamins and nutrients—and, of course, exercise.

We are aware that regular checkups by health professionals provide essential feedback, allowing us to understand what we are doing right and where it would be wise to change our behavior. We have conditioned ourselves to see our dentist every six months and to schedule an annual appointment with our family physician or internist to know where we stand regarding our vitals and biochemistry panels.

Yet when it comes to exercise in general, and yoga and Pilates in particular, this system of regular checkups and science-based modifications is oddly absent. Most of us take a faith-based approach to exercise practice: we genuinely believe it will help us, and until our bodies balk, we cling to that belief even when the evidence is slight or nonexistent.

Think about it: How do we really know what movements are best suited for our body type? What are the long-term effects of yoga, Pilates, or any other exercise regimen on our particular body?

It's a vital question, and there's no reason it should go unanswered. Just as a dentist or physician can predict certain conditions, a biomechanical evaluation from a Certified Fellow of Chiropractic Biophysics™ can help prevent pain or injury by prescribing precise movements that fit each body type.

Since this type of assessment is not yet the standard in our society, we see a growing epidemic of painful conditions and injuries directly related to physical fitness activities. Yoga and Pilates are at the forefront of this trend, thanks to their enormous popularity: an estimated 64 million people in the United States regularly participate in one or the other.

With this surge in participation over the last 20 years, I started to notice an escalating number of injuries and pain as a result of people engaging in these systems of movement. I became determined to find out why this was occurring by analyzing scientific research, to offer helpful guidance for yoga and Pilates practitioners. I describe what I have discovered in this book.

First, I will address the origins of yoga and Pilates, as well as the importance of tradition in these communities. Second, I will share comments and concerns from the health community regarding yoga and Pilates, pointing out the primary problems that put people at risk. Third, I will explain why certain traditional exercises can cause pain and injury. Finally, I will provide a checklist for safer practices, along with an extensive photographic review of sample exercises.

Due to the many different styles and long histories of Pilates and especially yoga, some readers will discern discrepancies between the information presented here and what they were taught about a particular practice. Rest assured that it is not my intention to criticize any specific school or method. My sole intent as an author is to help prevent unnecessary pain and injuries when practicing yoga and Pilates. The principles outlined in this book are based on scientific research into the biomechanics of the human body and can be applied to any exercise system.

I. HOW YOGA AND PILATES GOT STARTED

I decided to start this book with some background on yoga and Pilates because we so readily assume that their lengthy history guarantees that these systems of movement must be safe and effective. If not, how could they have lasted this long?

At the very beginning of my career, when I was still unfamiliar with the specific motions of yoga and Pilates, I viewed them as miraculous vehicles for achieving optimal health. I wasn't wholly mistaken: in my research, I found a substantial portion of the movements in each practice to be very beneficial to most body types. I have featured them in chapter 9, the most extensive section of this book. However, I also found that many of the most popular exercises cause harm to most body types, as described in chapter 8.

In this chapter, I summarize the origins of these two practices, noting that they have been approached in a generally uncritical way.

YOGA

Yoga is a collection of exercises/poses that utilize breath, relaxation, strength, flexibility, and meditation. Through the vast majority of its approximately 5,000-year history, this system of movement was handed down through a process of individual mentoring, from one teacher to one student. Yoga eventually made its way from India to the United States; in 1893, Swami Vivekananda introduced the basic principles of yoga at the World Parliament of Religions in Chicago. A very influential later pioneer was Richard Hittleman, whose Yoga for Health television programs reached millions, beginning in 1961.

In 1965, the doors were further opened to yoga in the United States when the legal quota on Indian immigration was lifted. In 1975, the first issue of the Yoga Journal was published with only 300 typewritten copies. Today, this journal has a monthly circulation of 350,000 and a readership of over one million people. However, the focus of that very first issue—the traditional one-on-one teaching method—has by now largely been lost. Today, most of the 15.8 million Americans who practice yoga do so in a crowded classroom environment.^{21,85}

PILATES

Pilates is a system of exercise that emphasizes core strength, breath, flexibility, and resistance training using specially designed equipment. It was developed over 100 years ago by Joseph Pilates, who was born in Germany and worked as a performer and boxer in England before World War I. At the outbreak of the war, he was forced into a detention

camp in Lancaster, where he was interned as a nurse-in-training with other German nationals. He shared with other detainees his self-taught studies of yoga and Zen as well as ancient Greek and Roman physical regimens. From this experience, he developed an original system of movement performed on the floor, which he called Contrology.

When Pilates was later transferred to another detention camp, he began devising rehabilitation equipment using bedsprings. By rigging the springs, he was able to create a unique system that provided both resistance and motion for injured, bedridden veterans. Today, the equipment used for Pilates does not differ very much from the original.

In 1926, Pilates moved to New York City, where dancers embraced his exercise method. Now called “Pilates,” this system of exercise has steadily grown in popularity since its introduction to the United States. In October 2000, the U.S. district court in Manhattan overturned the Pilates trademark, ruling that Pilates, like yoga and karate, is a type of exercise and not a brand. This freed up the use of the word “Pilates” and contributed to the explosion of Pilates as one of the country’s hottest fitness trends. Today, Pilates is practiced by millions in a classroom setting or the ideal one-on-one method.²¹

CONCLUSION

Teachers of yoga and Pilates often emphasize a firm adherence to tradition. Maintaining this connection to the past is important, but it is also critical for every health and wellness practice—medicine, nutrition, dentistry, chiropractic, podiatry, etc.—to undergo periodic scrutiny to ensure optimum safety and effectiveness. As two popular and powerful health-promoting practices, both yoga and Pilates stand to gain from the findings of scientific research, which can help practitioners maximize the benefits of their practice while avoiding unnecessary injury.