

**Heal Your Heart with Yoga:**  
**A Cardiologist's Guide to Treat and Prevent Heart Disease**  
*...featuring a 30-Day Program for Better Heart Health*

**By Dr. Indranill Basu-Ray**

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## Overview

Can the number one killer of Americans be stopped in its tracks?

Yes!

...Because patients with heart disease can now find new hope in an age-old health practice: yoga.

*Heal Your Heart with Yoga* explains how.

In this book, readers will discover that heart health problems can be both better treated – and possibly prevented – through practicing yoga. Scientific studies verify the beneficial role of this ancient health regimen which helps heart patients reduce anxiety, depression, and stress, while it also improves their cardiovascular fitness.

No other book currently in the mainstream marketplace integrates rigorous medical research with a practical program that shows millions of people how to heal their hearts through the venerated wisdom of yoga. It offers hope and inspiration to more than half of the U.S. population that has – or will have – to deal with heart disease in their lifetimes.

Further, this book offers readers a perspective on the healing power of yoga that goes far deeper than the popular images in advertisements that picture actors in convoluted yoga postures to sell vitamin supplements or workout clothes. It explains the pillars of traditional yoga and focuses on three main practices – poses (asanas), breathing techniques (pranayamas), and meditation (dhyana) – all within the context of a holistic approach to addressing cardiovascular problems. Readers will also learn how the latest medical devices and apps can help them monitor their hearts and improve their health or possibly prevent disease. Most importantly, the concept of incorporating yoga into a regimen to promote the prevention and healing of heart health problems is not based on personal anecdotal experiences which can vary from one person to another. Rather, it rests on solid medical research conducted in hospitals and medical institutions with hundreds of people.

The book is written by an eminent cardiologist with extensive expertise in Western medicine as well as personal training from a respected lineage of yogis in his native India. The author, Dr. Indranill Basu-Ray, has served on the faculty of esteemed institutions such as Harvard Medical School and Tulane University. He currently holds the position of Director of Cardiovascular Research at the Memphis (TN) Veterans Center where he is a staff Cardiologist and an Interventional Cardiac Electrophysiologist, while he also serves as an Adjunct Professor at the School of Public Health at the University of Memphis.

Dr. Basu-Ray began meditating at age six, and, as a young man, was initiated into the practice by a brother disciple of Paramahansa Yogananda, author of the classic bestseller, *Autobiography of a Yogi*. He has shared his medical wisdom through books for physicians as well as in newspaper articles and online outlets such as the Huffington Post. Dr. Basu-Ray has also spread his message through public events and speaking engagements. As founder of the American Academy of Yoga in Medicine (AAYM), he hosted the “Yoga as Medicine” conference in 2021 which drew an audience of 1.2 million online viewers and featured luminaries such as Deepak Chopra.

In *Heal Your Heart with Yoga*, Dr. Basu-Ray draws on a wealth of medical research that documents the positive effects of yoga in the lives of heart patients. For instance:

- In one [study](#) that assessed the impact of yogic meditation on patients with cardiovascular problems, researchers found that not only did the meditators initially experience significant decreases in heart disease symptoms, they actually lived longer. In the five-year follow up period to the study, there was a remarkable 48% decrease in all-cause death rates, heart attacks, or strokes among the group of meditating patients.
- Researchers examining [the effect of yoga in patients with hypertension](#) (high blood pressure) reported that those engaging in yogic breathing and meditation practices reduced their blood pressure readings at almost twice the rate of non-practitioners. Moreover, scientific trials comparing aerobic exercises (like running, jogging and cycling) and Zumba showed them to be inferior to yoga in terms of reducing blood pressure rates.
- The [YOGA My Heart Study](#) assessed the clinical impact of yoga in patients with atrial fibrillation (Afib) – a condition that affects more than 3.5 million Americans. Of the patients experiencing episodes of Afib in the control phase of the study, 22% did not have any episodes during the 90-day intervention period when they participated in twice weekly yoga classes.
- To examine the potential use of yoga as a preventive therapy to reduce the risk of cardiovascular disease, researchers conducted [a meta-analysis of 64 randomized controlled trials](#) involving more than 16,000 patients. They found that yoga therapy led to significant improvements in blood pressure levels, body mass index (BMI), and hemoglobin levels. Because of its beneficial impact on major heart disease risk factors, the study concluded that yoga could, indeed, play a role as an effective supplementary therapy in preventing heart health problems.

Studies also show that yoga reduces inflammation, lowers cholesterol, battles stress, and fills a need as a low investment, readily available therapy that not only complements existing standard treatments for heart disease, but can also help to prevent it.

The vast audience for *Heal Your Heart with Yoga* includes more than 125 million adults – half the population of the U.S. – who are experiencing some form of cardiovascular disease, plus the millions worldwide affected by this condition. It also includes millions who are in danger of developing cardiovascular problems due to their family history or because of other risk factors for heart disease such as smoking or prediabetes. In the U.S., the Centers for Disease Control and Prevention (CDC) estimates that one out of three adults – about 98 million people – have prediabetes, which puts them at a higher risk for developing cardiovascular problems. The CDC also reports that slightly more than 40 percent of Americans are considered obese – another risk factor for heart disease. While medical studies have validated the use of yoga in reducing heart disease risk factors, accumulating data now suggests that it can also offer what is medically termed “primordial prevention” – which means yoga could possibly prevent heart disease before a person develops any risk factors in the first place.

Another audience for this book is found among the thousands of medical professionals and healthcare practitioners who will discover it fills their need for bona fide research and practical information about yoga as a complementary and preventative therapy that can potentially help

their patients. In addition, this book will enable the growing legions of U.S. yoga practitioners and teachers to deepen their understanding and application of the health-promoting principles at the core of this ancient science. Notably, more than 300 million people practice yoga worldwide, with a vast majority of them being English speaking, creating a wider audience for this book which provides a well-researched contemporary resource for the use of yoga in disease prevention.

*Heal Your Heart with Yoga* not only brings together the wisdom of yoga with current medical knowledge, it also offers readers a safe and easy-to-follow month-long health program developed by Dr. Basu-Ray for heart patients. The *30-Day Heal Your Heart with Yoga Program* is designed to give readers a structured plan for applying the knowledge they've acquired in the book to their own lives. It provides guidance for incorporating yoga practices into daily schedules so that they become routine. Most importantly, this program initiates physiological changes to the internal environment of the body. These changes help to improve cardiovascular health by eliminating stress, reducing inflammation, and enhancing the neuroplasticity of the brain, making it more resistant to issues such as depression and anxiety that can exacerbate heart disease.

The book opens with an overview of the role of yoga in promoting heart health. Readers will learn some of the basics about how the heart functions – and malfunctions – resulting in cardiovascular problems. By introducing the key research studies on the effectiveness of yoga in addressing these problems in the first chapter, readers will begin to understand how this ancient science can help resolve modern illnesses.

After the introductory chapter, the next one explains that yoga goes far beyond the physical poses (asanas) most often associated with it in popular culture. Rather, readers will learn about the rich, multi-faceted tapestry of this wellness practice and how it contributes to a healthy lifestyle. Building on the foundation laid in the initial chapters, the book then offers readers a deeper look at the major cardiovascular diseases, with a chapter on each of these conditions: hypertension, coronary artery disease, atrial fibrillation, and heart failure. A special chapter on the yogic approach to diet is included because nutrition plays such an important role in heart health.

Finally, the closing chapter covers the best practices for incorporating yoga into cardiac rehabilitation or aftercare programs – and it includes a section on using digital wearables and technology to track blood pressure rates, record EKGs, measure Heart Rate Variability, and monitor other functions to help readers track their progress in achieving better heart health. Readers will also be given guidance on talking to their doctors about practicing yoga, while at the same time, medical professionals will discover guidelines for managing this complementary therapy – such as the medical practice guidelines Dr. Basu-Ray wrote for physicians on behalf of the American Heart Association on using meditation to treat cardiovascular diseases.

In writing this book, Dr. Basu-Ray aims to offer a holistic blueprint for heart health as part of his larger endeavor to apply the wisdom of yoga in a way that benefits all. *Heal Your Heart with Yoga* will help fulfill this mission to offer an enriching and comprehensive approach to healthcare to millions – one heartbeat at a time.

## The Audience

### Heart patients...

Given that [nearly half of all U.S. adults](#) have cardiovascular disease of one type or another, it is no exaggeration to assert that the audience for this book numbers in the millions.

Specifically:

- The American Heart Association estimates that between 2017 and 2020, more than [125 million](#) adults in the United States had some form of cardiovascular disease (CVD).
- A 2023 study by the Association also reports that [more than 122 million](#) Americans have high blood pressure.
- Statistics from the National Institutes of Health show that about [one-half of Americans between the ages of 45 and 84 have atherosclerosis](#) (coronary artery disease).
- According to The Centers for Disease Control [12.1 million](#) people in this country will have atrial fibrillation (Afib) in 2030.
- And the World Health Organization cites cardiovascular diseases as the [leading cause of death globally](#). It remains the predominant cause of death in the U.S., claiming the lives of twice as many people as cancer, the second largest killer.

### Healthcare providers...

A secondary audience for this book includes healthcare professionals – doctors, nurses, physiotherapists, and other medical practitioners – who are increasingly aware of the limitations of conventional medical treatments for heart disease and are searching for solid research on complementary therapies that could potentially help their patients.

These practitioners include:

- [American College of Cardiology \(ACC\)](#): With a membership of approximately 54,000, the ACC is one of the most influential cardiology associations in the United States. Its members include cardiologists and cardiovascular specialists committed to advancing cardiac care through education, research, and practice.
- [American Association of Cardiologists of Indian Origin \(AACIO\)](#): This unique association, comprising approximately 80,000 physicians, plays a crucial role in bringing together cardiologists of Indian origin. The AACIO is instrumental in promoting cardiovascular health, research, and education, particularly among Indian-origin populations.
- [Heart Rhythm Society](#): This international society, with more than [8,200 members](#) across 94 countries, focuses on the study and management of heart rhythm disorders. The Society's members, including electrophysiologists, cardiologists, and other healthcare professionals, who are all key stakeholders in understanding the potential of yoga in managing conditions like atrial fibrillation.
- [American Society for Preventive Cardiology \(ASPC\)](#): The ASPC specializes in the prevention of cardiovascular diseases. The organization includes a diverse group of healthcare providers who are instrumental in advocating for this mission.
- [Academy of Cardiovascular & Pulmonary Physical Therapy \(APTA\)](#) and the [Association of Chartered Physiotherapists in Cardiovascular Rehabilitation \(ACPICR\)](#): These organizations represent physical therapists and physiotherapists who specialize in cardiovascular and pulmonary rehabilitation. These professionals can integrate yoga-based interventions into their rehabilitation programs.

### *Yoga enthusiasts...*

The popularity of yoga in the United States and globally signifies a substantial and growing audience for this book. Over the past decades, the practice of yoga has not only entered the American mainstream, it has also seen a dramatic increase in its acceptance, paralleling the rise in awareness of holistic health and wellness issues. The evidence of yoga's widespread popularity is apparent in these developments:

- *Rapid growth of yoga practitioners:* According to the [Harvard Health newsletter](#), there was a notable 50 percent increase in the number of Americans practicing yoga between 2012 and 2016. This trend has continued, with approximately [36 million](#) Americans now practicing yoga regularly. This substantial number reflects a wide demographic reach, encompassing people of various ages, backgrounds, and health conditions.
- *Increase in the ranks of yoga teachers:* Alongside the growing legions of practitioners, the number of yoga teachers in the U.S. has surged, reaching about [85,000](#). This rise in professional instructors indicates a deepening interest in yoga not only as a practice but also as a profession, contributing to the spread and diversification of yoga styles and approaches across the country.
- *Popularity of yoga publications:* [Yoga Journal](#), a leading publication in the field of yoga, boasts a social media following of more than 3 million. The strong online presence of this journal and others reflects the widespread interest in yoga content, ranging from practice tips and health benefits to spiritual aspects and lifestyle integration.

Clearly, the millions grappling with heart health issues in this country – and around the world – comprise a huge potential market for this book. In addition, alternative healthcare practitioners, as well as those who practice and teach yoga, are also prime audiences for the information and inspiration *Heal Your Heart with Yoga* will provide.

## Competitive Analysis

While the current market offers a number of books on either yoga or cardiovascular health, virtually none combine the two subjects in the way they are woven together in *Heal Your Heart with Yoga*. Further, no other authors offer the unique expertise of Dr. Basu-Ray with his extensive credentials in the field of cardiology as well as his personal lifelong training in yoga and meditation. This sampling of competitive titles provides a snapshot of books of possible interest to heart patients who form the core audience for *Heal Your Heart with Yoga*:

- *Prevent and Reverse Heart Disease: The Revolutionary, Scientifically Proven, Nutrition-Based Cure* (Penguin 2023) by Caldwell B. Esselstyn Jr., M.D. – This book promotes a plant-based, nutrition-focused regimen to prevent and reverse heart disease, emphasizing the role of diet over other lifestyle factors. It does not, however, address the significant benefits that physical activities like yoga can provide for heart health. *Heal Your Heart with Yoga* features a holistic regimen that not only supports physical health but also enhances a nutrition-based approach by adding the benefits of improved circulation, stress relief, and mental focus through the practice of yoga.
- *Stay off My Operating Table: A Heart Surgeon's Metabolic Health Guide to Lose Weight, Prevent Disease and Feel Your Best Every Day* (Ovadia Heart Health LLC 2021) by Philip Ovadia M.D. – Written by heart surgeon Philip Ovadia, this book focuses on metabolic health as a means to prevent heart disease and emphasizes lifestyle changes for weight management. While weight management is important for heart patients, this book does not delve into other treatment modalities, such as the role of yoga and meditation in promoting heart health.
- *Unholy Trinity: How Carbs, Sugar & Oil Contribute to Heart Disease* (Pivotal Performance Publishing 2023) by Daniel Trevor and Ford Brewer – This book examines the dietary aspects that contribute to heart disease, discussing the role of carbohydrates, sugar, and oils. The author is described as a “citizen scientist” who does not have medical training. In addition, this book does not address physical exercise or stress management which are part of the credible, evidence-backed program found in Dr. Basu-Ray's book.
- *Living in the Light: Yoga for Self-Realization* (Harmony Books 2023) by Deepak Chopra, M.D. – While this book from best-selling author Deepak Chopra offers readers insights into the philosophy and practice of yoga, it does not focus on its application as a complementary therapy for heart disease. The book does present a section on yoga postures (asanas), but it does not provide information on the optimal poses for various heart conditions which are part of the program featured in *Heal Your Heart with Yoga*.
- *Yoga for a Healthy Heart: A Comprehensive Guide to Using Yoga for Cardiovascular Health* (Independently published 2023) by Gregory K. Edward – This title is included for information purposes only because this self-published, 77-page book offers no information on the author's credentials. Conceivably, the book may be the product of an artificial intelligence program.



## Promotional and Media Outreach

### **Author's Network:**

Dr. Basu-Ray has developed an extensive network of thousands of medical practitioners and members of lay audiences who attend his conferences, training sessions, and speaking engagements while he also reaches followers through his websites and social media outlets.

### ***Conferences***

Significantly, as founder of the American Academy of Yoga in Medicine, he hosted the “Yoga as Medicine” conference in 2020 which drew an audience of 1.2 million online viewers. The conference featured 50+ sessions and more than one hundred speakers including luminaries such as Dr. Deepak Chopra, Dr. H. R. Nagendra, Dr. David Frawley, and Ms. Nivedita Bhide. The faculty included leading international scientists, physicians, and researchers who presented cutting edge study findings on the health benefits of yoga.

In the past five years, more than 5,000 people have attended Dr. Basu-Ray’s workshops and webinars – including the 1,000+ in-person participants in the world’s first symposium on the “Role of Meditation in Prevention and Treatment of Cardiovascular Diseases.” This event took place in 2019 at the All India Institute of Medical Sciences (AIIMS), Rishikesh, India and the invited faculty came from major universities, including Harvard, Emory, AIIMS-New Delhi, and the Postgraduate Institute of Medical and Educational Research (PGI)-Chandigarh, India.

### ***Speaking Engagements***

Dr. Basu Ray has delivered invited lectures worldwide on yoga and meditation to prevent and treat cardiovascular diseases, including speaking to audiences at Harvard, MIT, Mayo Clinic, Case Western, Georgia Tech, and Tulane University. He also addressed the prestigious Indian Science Congress on Yoga and Cardiovascular Diseases in early 2020.

### ***Online Outreach***

Dr. Basu-Ray’s digital outreach includes:

- 5,000+ Attendees at workshops/webinars in the past five years
- 4,000+ LinkedIn followers
- 1,500+ Instagram followers
- 1,000+ YouTube subscribers
- 2,000+ Newsletter subscribers including health professionals and yoga enthusiasts
- 15,000 Visitors to these websites: <https://ibasuray.com/> - <https://aaymonline.org/>

### ***Potential Endorsers***

In addition to promoting *Heal Your Heart with Yoga* through his networks, Dr. Basu-Ray will also reach out to prominent individuals with whom he has a professional and, in some cases, a personal relationship, and they will be approached about endorsing the book. Some of those potential supporters include the following:

- Dr. Deepak Chopra – Author of more than 40 books including bestsellers like *The Seven Spiritual Laws of Success*, Dr. Chopra is widely known as an advocate for alternative medicine. He was a featured speaker at the “Yoga as Medicine” conference hosted by Dr. Basu-Ray in 2020.  
Website: [Deepak Chopra](#)
- Dr. Dean Ornish – Renowned for his work as an advocate for innovative approaches to improving health, Dr. Ornish is the author of the bestselling book *Dr. Dean Ornish’s Program for Reversing Heart Disease*. He is the founder and president of the non-profit Preventive Medicine Research Institute in Sausalito, California, and a Clinical Professor of Medicine at the University of California, San Francisco.  
Website: [Dean Ornish](#)
- Dr. Glenn N. Levine – A distinguished Master Clinician and Professor of Medicine at Baylor College of Medicine in Houston, Texas, Dr. Levine is globally recognized for his expertise in cardiovascular disease.  
Website: [Glenn N. Levine, M.D.](#)
- Dr. Lorenzo Cohen, Ph.D. – Dr. Cohen is the Richard E. Haynes Distinguished Professor in Clinical Cancer Prevention and Director of the Integrative Medicine Program at The University of Texas MD Anderson Cancer Center (Houston) and Distinguished Clinical Professor, Fudan University Cancer Hospital, Shanghai, China. He focuses on how lifestyle factors like diet, exercise, stress management, and integrative medicine practices, such as yoga and acupuncture, can improve the quality of life and outcomes for cancer patients. Website: [Lorenzo Cohen](#)
- Professor Holger Cramer, Ph.D. – As the Director of Research at the University of Duisburg-Essen's Department of Internal and Integrative Medicine in Germany, professor Cramer conducts studies on yoga's effectiveness for conditions like chronic pain and mental health. His work, grounded in rigorous scientific methods, helps integrate yoga into conventional medical practices, highlighting its value for physical and mental wellness. He holds prestigious positions, including the presidency of the International Society for Traditional, Complementary and Integrative Medicine Research (ISCMR) and the chairmanship of the German Society for Naturopathy.  
Website: [Holger Cramer, Ph.D.](#)
- Dr. David Frawley – Also known as Vamadeva Shastri, Dr. Frawley is a teacher and author renowned for his contributions to Vedic science and Ayurveda. Through his extensive writings and the founding of the American Institute of Vedic Studies, Dr. Frawley has played a crucial role in bringing ancient Indian wisdom, including yoga, Ayurveda, and Vedic astrology, to a global audience.  
Website: [David Frawley, Ph.D.](#)

### **Author's Media Outreach:**

Dr. Basu-Ray has written for multiple media outlets and served as a medical expert for television channels in both the U.S. and India. To promote *Heal Your Heart with Yoga*, Dr. Basu-Ray will develop presentations and press releases to tap his media contacts for coverage of the book. The following section presents a sample of his published work and media appearances:

#### *Huffington Post*

- [World Yoga Day: Yoga is much more than being on a mat – it is life itself](#)
- [The Need to Expand Palliative Care with an Understanding of Yoga and Meditation to Provide Modern Day Integrative Therapy](#)
- [You don't need technology to live a long life, yoga will do](#)

#### *Times of India*

- [Heart attack: Drugs to prevent are good, but changing lifestyle is better](#)
- [Revolutionizing healthcare: The untapped potential of yoga](#)
- [The secrets of yoga: A fight with diabetes](#)
- [Why knowledge of yoga and its medical benefits are important for allopathic trained physicians?](#)

#### *Hindustan Times*

- [Indian-American cardiologist to present new method to test efficacy of yoga](#)
- [Yoga can help stem ongoing cardiovascular epidemic: experts](#)
- [Cardiologist on hidden causes of heart attack during physical activity](#)
- [9 Ways Yoga can boost heart function](#)

#### *Media Interviews/Apearances*

- [Memphis VA first to provide life-saving procedure for heart failure patients](#)  
Action News 5, Memphis, TN, May 11, 2023
- [Atrial Fibrillation Awareness Month](#)  
FOX 13 News, Memphis TN, November 16, 2019
- [Meditation as a Tool for Cardiac Care – Interview with Dr Indranill Basu-Ray](#)
- [Dr. Indranill Basu-Ray on Use of Anti-viral Drug Remdesivir](#)  
[Outlook Magazine](#) – More than 1 million views
- [The Science of Ageless Body & Timeless Mind](#)
- [The three hearts – physical, emotional, and spiritual: A cardiologist's perspective](#)
- [Exploring the Depth of Yoga: Beyond the Mat with Dr. Indranill Basu Ray](#)

## About the Author

Dr. Basu-Ray is a staff Cardiologist and Cardiac Electrophysiologist at the Lt. Col. Luke Weathers, Jr. VA Medical Center. Memphis, TN. At the medical center he serves as the Director of Cardiovascular Research & Innovation and the Director of Clinical Cardiac Electrophysiology Laboratory. He is an Adjunct Professor at The University of Memphis, Memphis, TN.

A former faculty member at multiple distinguished institutions – including the Harvard Medical School and Tulane University – Dr. Basu-Ray has authored more than one hundred peer-reviewed abstracts and articles and is a member of the editorial teams for numerous medical journals. The American Heart Association tapped Dr. Basu-Ray to write the organization's scientific statement on using meditation to treat cardiovascular diseases. He is the Editor of the *The Principle and Practice of Yoga in Cardiovascular Medicine* (Springer 2022), the world's first reference book on the subject written for physicians. His next book [\*Yoga for Cardiovascular Disease and Rehabilitation: Integrating Complementary Medicine into Cardiovascular Medicine\*](#) was recently published (Elsevier 2025) In the popular press, he has published health articles for lay readers in outlets such as the *Times of India* and the online Huffington Post.

Dr. Basu-Ray trained in Medicine and Cardiology in India and completed his U.S. training in Medicine and Cardiology at the University of Buffalo and Tulane University. He also trained in Clinical Cardiac Electrophysiology (EP) at the Texas Heart Institute, Baylor College of Medicine, and in EP research at the Massachusetts General Hospital, Harvard Medical School.

He is the founder and chairman of the American Academy for Yoga in Medicine (AAYM), an organization of physicians, scientists and researchers that holds regular international conferences including the first conference focusing on “The Role of Meditation in Cardiovascular Diseases” attended by more than one thousand physicians in 2019. In 2021, he hosted the “Yoga as Medicine” conference which drew an audience of 1.2 million online viewers. He also addressed the prestigious Indian Science Congress on Yoga and Cardiovascular Diseases latest research in early 2020.

Dr. Basu-Ray has been meditating since the age of six and he learned meditation from multiple Himalayan gurus. He was initiated in the practice of Kriya Yoga by Swami Hariharananda Giri, the brother disciple of Paramhansa Yogananda, author of the classic book “Autobiography of a Yogi.” He has been practicing, teaching, and researching meditation for over three decades now.

*Medical Contributions:* Dr. Basu-Ray played a pioneering role in developing multiple tools for atrial fibrillation and Ventricular Tachycardia ablation in humans today. He was involved in the initial proof of concept for cryotherapy and the laser balloon used for atrial fibrillation ablation. He contributed to the initial research of a new iteration of 3D mapping systems using multimodality imaging used for intracardiac mapping today. Dr. Basu-Ray performs complex ablations for Atrial Fibrillation and Ventricular Tachycardia. He also treats severely ill heart failure patients with ICD's, Cardiac Resynchronization Devices, S-ICDs, and state of art newer devices including Cardiac Contractility Modulation & Barostim. In addition, he implants pacemakers and leadless pacemakers for bradyarrhythmia therapy.

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**Appendix**

**Chapter Summaries**

**Chapter 1: Healing Your Heart**

This opening chapter serves as a warm invitation to readers to discover how yoga can be a formidable ally in the fight against heart disease. Readers are assured that the concept of yoga as a healing force in cardiovascular care is well-grounded in reputable scientific studies which are explained by an author with impeccable medical credentials. A brief overview of important research reports will inspire readers with impressive results – for example, the study attesting to a notable reduction in episodes of atrial fibrillation by participants in twice-weekly yoga classes, or one showing the significantly longer survival rates for patients with hypertension who regularly engaged in meditation.

Following the introductory section, the chapter then presents a short primer on how the heart functions. Through basic illustrations and easy-to-follow text, readers will learn about the chambers of the heart and will get a glimpse of its electrical and pumping systems as they perform the critical job of maintaining a healthy blood supply throughout the body.

Once readers are shown how the heart ideally works, the chapter then examines what happens when it doesn't – including the development of major ailments like high blood pressure, coronary artery disease, arrhythmias, and heart failure. Basic descriptions of these four ailments are given and each will be explored in more detail in subsequent chapters. In addition to defining these primary cardiovascular malfunctions, this section of the chapter also describes how they contribute to heart attacks and strokes – and information on other health problems, such as valvular or congenital heart diseases and diabetes, are also covered.

Throughout the chapter, the author makes clear to readers that yoga is a complementary therapy – not a replacement for cardiovascular care by their physicians. At the same time, he points out that while modern-day technological marvels like stenting and bypass surgery represent breakthroughs in medicine, they do not cure heart disease. Surgical interventions provide only symptomatic relief and unless patients change their lifestyles to modify risk factors they will likely require further stents or invasive operations. But by adopting a balanced diet, exercising regularly, practicing yoga, eliminating smoking, controlling alcohol consumption, and reducing stress, heart patients can lower their risks and possibly prevent further cardiovascular problems.

To illustrate his point, Dr. Basu-Ray offers the advice he often gives to patients, encouraging readers to “fix the roof and not just put buckets under the leaks.” That analogy is used to bolster the rationale for heart patients to adopt a holistic approach to their health, and care for themselves in ways that promote well-being instead of maintaining habits that weaken their bodies. This healing message illuminates the book's philosophy of prevention and empowerment, positioning the author's 30-day yoga program not just as a healthcare intervention but also as a lifestyle transformation. In closing the chapter, Dr. Basu-Ray invites readers to open themselves to the life-changing potential of yoga to improve their personal health as well as the lives of millions around the world grappling with the silent epidemic of heart disease.

***Key Points of chapter 1:***

- *Overview of significant studies demonstrating yoga's benefits*
- *Primer on heart function with basic illustrations*
- *Examination of major heart ailments and their impacts*
- *Emphasis on yoga as a complementary, not replacement therapy*
- *Analogy of “fixing the roof” to promote lifestyle changes for heart health*

**Chapter 2: The Yoga Path to Heart Health**

While the opening chapter of the book introduces readers to the idea that yoga can be beneficial to heart patients, this chapter explores how this ancient practice actually produces positive effects in the body. The chapter also offers insights into the rich history and multi-faceted pillars of yoga that are often obscured in popular culture.

To begin, the chapter points to the measurable impact of yoga on the cardiovascular system. Increasing scientific evidence documents its potential to lower blood pressure, enhance diabetes control, and improve cholesterol – all protective against heart attacks and strokes. Studies also show it can help reduce stress, manage body weight, enhance respiratory function, and boost overall fitness. As reported in the [Harvard Heart Letter](#), a review of several studies concluded that participants in yoga classes cut five points off their blood pressure readings and experienced a 12-point drop in their levels of harmful LDL cholesterol – plus they lost an average of five pounds. That report is only one of several that will be highlighted in this chapter.

Dr. Basu-Ray further enlightens readers about how the practice of yoga translates into health benefits because it activates the parasympathetic nervous system (PSNS). The PSNS, often referred to as the “rest and digest” system, balances the activity of the sympathetic nervous system – which helps to keep in check the “fight or flight” response that can raise stress levels and damage the heart.

After laying this scientific groundwork about the inner workings of yoga in the body, the author then presents an expansive view of the history and foundations of this ancient science. Readers will learn that Dr. Basu-Ray extols the practice of yoga as much more than twisting the body into contorted positions or doing headstands. With roots that reach back thousands of years, yoga is actually a pathway to emotional, physical, and spiritual wellness that is particularly beneficial to individuals recovering from heart conditions. The eight pillars of yoga are defined so readers can begin to understand the elaborate underpinnings of this age-old health practice that go far beyond a simple set of physical exercises. Following this introduction to the foundations of yoga, the author goes on to inform readers that this book will focus primarily on three of the eight pillars: poses (asanas), breathing techniques (pranayamas), and meditation (dhyana).

Not only does yoga branch out from eight different limbs, but a host of different styles of this practice have evolved over the years. Clear descriptions of these various styles will help readers distinguish among them, and specific recommendations for heart patients are also included in this section. For example, gentle forms of Hatha yoga and what’s now known as “restorative yoga,” are generally more appropriate for those with cardiovascular problems, compared to so-called “power yoga” or “hot yoga.”

By the end of this chapter, readers will better understand the author’s goal of demystifying the biological benefits of yoga and making it accessible for contemporary heart care.

**Key Points of chapter 2:**

- *Detailed explanation of yoga's impact on the cardiovascular system*
- *Scientific evidence supporting yoga's health benefits*
- *Explanation of the parasympathetic nervous system (PSNS) and its health effects*
- *Overview of the history and eight pillars of yoga*
- *Focus on three primary pillars: asanas, pranayamas, and dhyana*
- *Description of various yoga styles suitable for heart patients*

**Chapter 3: Yoga for High Blood Pressure (Sample chapter)****Chapter 4: Yoga for Coronary Artery Disease / Atherosclerosis****Chapter 5: Yoga for Arrhythmia / Atrial Fibrillation****Chapter 6: Yoga for Heart Failure**

While Chapters 3 through 6 each focus on a different heart condition, all of them share common elements and a similar structure. All of these chapters will include composite patient stories to bring to life the book's message about the powerful influence of yoga on heart health. So, too, will each of these chapters provide a basic primer on what happens in the body when a person experiences the cardiovascular problem that is the focus of the chapter – whether it's hypertension, atherosclerosis, atrial fibrillation, or heart failure.

Most importantly, each of these chapters will present the results of research studies that substantiate the premise that yoga practices can improve a patient's cardiovascular condition – no matter which particular ailment they are dealing with. For example, the chapter on arrhythmias will highlight findings showing that 22% of participants in one study did not experience episodes of atrial fibrillation when they regularly participated in yoga classes. Those readers primarily interested in the high blood pressure chapter will learn that patients diagnosed with hypertension who meditated lived longer than non-meditators, according to one research report. It should be noted that, because heart failure can result from a variety of health problems, Chapter 6 will broaden its lens a bit to include discussions about heart attacks, strokes, diabetes, and other related issues.

The core chapters, from 3 through 6, will also present specific poses as well as recommendations for breathing exercises and meditation techniques, all tailored to the specific heart condition being addressed in the chapter. Illustrations and instructions will give readers the tools they need to implement the recommended yoga practices. The example below shows how a portion of the practical recommendations for yoga practices will be presented to readers in the core chapters.



## Tadasana (Palm Tree Pose)

*Note: All illustrations shown in the proposal are placeholders only to suggest what might be included in the book.*



‘Tada’ means palm tree or mountain. This asana teaches one to attain stability and firmness and forms the base for all the standing asanas.

### Technique

- Stand with feet 2 inches apart.
- Inhale, lift your arms up to the shoulder level in the front.
- Interlock the fingers, and turn the wrist outwards.
- Now inhale, raise the arms up above your head.
- Raise the heels off the floor and balance on the toes as you raise your arms.
- Stay in this position for 10-30 seconds.
- Bring the heels down.
- Exhale, release the interlock of the fingers and bring the arms down and come back to standing posture.

### Key Points chapters 3 through 6:

- *Patient anecdotes to illustrate real-life benefits*
- *Basic primers on specific heart conditions*
- *Scientific studies supporting yoga’s effectiveness*
- *Specific yoga poses, breathing exercises, and meditation techniques*

## Chapter 7: Healing Your Heart through Diet and Lifestyle Choices

Dietary issues often pose a challenge to average Americans seeking to improve their health, given the relentless bombardment of advertisements that seem to promote both high-fat foods and weight loss programs, almost simultaneously. With this background of conflicting messages, many people are further confused when every new study from nutrition experts can sound like it contradicts a previous one. To address this confusion, this chapter will help readers clarify diet issues for heart patients and guide them toward optimal food choices for cardiovascular health. It will also touch on the importance of adapting a heart healthy lifestyle by reducing stress through the yoga practices described throughout the book.

Initially, readers will get an overview of the various conventional dietary recommendations for those with cardiovascular problems – such as the popular Mediterranean Diet as well as the DASH diet which is promoted by the American Heart Association (AHA). Then, the parallels between these well-known approaches to nutrition and the traditional Sattvic diet – sometimes called the “yoga diet” – will be explained. All of these diets fundamentally recommend plant-based, whole foods and discourage the consumption of alcohol and fatty meats as well as excess sodium and sugar. A simple chart will illustrate the similarities among these nutrition plans to reassure readers – and their healthcare providers – that the yogic approach to diet is in sync with well-established guidelines for cardiovascular health.

Readers will learn that the term “Sattvic” derives from the Sanskrit word “sattva” which is a concept in Indian philosophy that is roughly defined as “true essence.” The word “sattva” is also used to identify one of three “gunas” or qualities that describe various foods in the yogic tradition – including three categories called Sattva, Rajas, and Tamas. Each guna imparts unique mental and physical characteristics. Rather than classify a food as “good” or “bad,” the Sattvic approach seeks to find a balance among the varied qualities of each guna. The yogic concept of Mitahara – which means “moderation” – will also be described, along with advice to readers to gradually adopt healthier diets and avoid “all or nothing” eating plans.

To expand on this basic explanation of the Sattvic diet, readers will learn about the principle of nonviolence (Ahimsa) – one of the ethical pillars of yoga – and how it applies to food choices. This discussion of diet and yogic principles will further emphasize the value of mindful eating and the importance of discerning physical hunger from emotional cues. Fasting to promote health is discussed in this chapter as well, and it includes guidelines for safely engaging in this practice. Heart patients, of course, will be strongly advised to consult with their health care providers before attempting a fasting regimen.

This chapter highlights the importance of synchronizing daily activities with natural rhythms, similar to the modern concept of circadian rhythms. By making food choices that promote cardiovascular fitness, reducing stress, and integrating yogic principles and practices into daily living, readers will be well on their way to creating a heart healthy lifestyle.

***Key Points for chapter 7:***

- *Challenges to maintaining a heart-healthy diet*
- *Step-by-step guide to making incremental dietary changes*
- *Scientific evidence supporting specific dietary choices*
- *Practical advice on stress reduction and smoking cessation*
- *Explanations about importance of maintaining a healthy body weight*

**Chapter 8: Yoga for Cardiac Rehabilitation and Aftercare**

The medical advice and treatment options offered to patients experiencing a cardiac event can vary from individual to individual. In the aftermath of a stroke or heart bypass operation, patients might undergo an extensive program of physical therapy or other types of medical interventions. Someone who’s had an episode of atrial fibrillation may be prescribed blood thinners or told to cut back on caffeine as part of their medical aftercare or follow-up appointments. And, while patients diagnosed with hypertension may not be enrolled in a full-scale cardiac rehabilitation program, their doctors are nevertheless likely to advise them to reduce salt in their diets or to focus on managing stress. Because of these varied approaches to medical care, this chapter is designed to help heart patients understand the best ways to improve their health after a significant cardiovascular event or diagnosis – and how to incorporate yoga practices into their recovery.

Initially, the chapter introduces readers to the standard approaches to cardiac rehabilitation – defined as a comprehensive program for individuals recovering from heart disease or surgery by the American Heart Association. This medically supervised program encompasses exercise training, stress reduction counseling, and education on healthy living – including advice on optimal nutrition and smoking cessation. According to a detailed report in the National Library of Medicine, cardiac rehabilitation unfolds in three main phases: the initial clinical phase, the subsequent outpatient phase, and the final post-rehabilitation phase. This structure offers a systematic approach to recovery and long-term heart health management, which is crucial for patients to understand when navigating the U.S. healthcare system.

Following this overview of standard cardiac rehabilitation practices, the chapter transitions into discussing the integration of yoga as a complementary component of a patient's rehabilitation journey. As noted throughout the book, yoga, with its ancient roots and holistic focus, offers more than physical exercise, as it encompasses not only poses (asanas) but also breathing techniques (pranayamas), and meditation (dhyana). Yoga also provides a pathway to emotional and spiritual wellness that is particularly beneficial for individuals recovering from heart conditions. In addition, this section of the chapter explains the adaptability of yoga, which can be tailored to individuals at any fitness level or stage of recovery.

Most importantly, boxed sections (sidebars) in this chapter offer readers practical guidance on how to talk to their cardiologists and health care professionals about safe ways to engage in yoga practices based on their health status and sound medical advice. Likewise, readers will also learn about communicating with yoga instructors regarding appropriate yoga styles for cardiac rehabilitation – from the gentle flows of Hatha and the restorative aspects of specific poses to the more dynamic sequences of Vinyasa. In these sections – and throughout the book – Dr. Basu-Ray will remind readers of the importance of listening to the body and avoiding injury when undertaking yoga practices.

***Key Points for chapter 8:***

- *Introduction to cardiac rehabilitation*
- *Benefits of integrating yoga into rehabilitation*
- *Tailoring yoga practices to individual needs*
- *Practical guidance on communicating with healthcare professionals*
- *Importance of listening to the body and avoiding injury*

## Appendix

The Appendix offers readers details on specific issues that expand on aspects of yoga practice covered in the preceding chapters of the book. Items proposed for the Appendix include:

- **Guidelines for Physicians**

This section covers a range of issues for doctors who want to encourage their patients to practice yoga as part of their cardiovascular care. They can talk to their patients about the importance of gently easing into yoga or provide advice on how to participate in classes after surgery. Doctors, too, can stay aware of the need to adjust medications as their patients' participation in yoga begins to exhibit positive effects. Those on high blood pressure medications, for example, may be able to reduce or eliminate them. Then, too, healthcare providers will want to address special adaptations, if needed, for patients with pacemakers or sleep apnea implants.

- **Guidelines for Yoga Instructors**

Yoga teachers will find helpful advice on working with clients who have cardiovascular issues. These guidelines will provide tips on adapting poses and other practices to individual needs and will emphasize the critical need to help heart patients avoid injuries while participating in classes or engaging in yoga at home.

- **Guide to Finding a Yoga Therapist**

In this guide, readers will be given resources for locating a certified yoga therapist with experience in cardiac care. They will also find advice about assessing a therapist's qualifications in order to ensure they understand the nuances of practicing yoga with a heart condition.

- **30-Day Heal Your Heart with Yoga Program**

This program leads readers through a month-long program designed to improve their cardiovascular health. The initial stages of this plan offer instructions and guidance for simple yoga practices that anyone can do including basic meditation practices (dhyana), breathing techniques (pranayamas), and asanas (poses).

In terms of breathing exercises, the complexity of the pranayama techniques gradually increases over the course of the program in order to enhance Heart Rate Variability (HRV) – one measure of a healthy heart. Additionally, simple meditative practices (dhyana) introduced from day one of the program will help reduce stress, anxiety, and depression, making these practices a pivotal component in maintaining heart health. The 30-day program also includes guidance on establishing a consistent meditation schedule within daily routines to maximize the therapeutic benefits of these practices.

Illustrated yoga poses (asanas) are also presented to readers in incremental steps. This approach accommodates the needs of beginners and heart patients who cannot perform difficult postures, enabling them to slowly improve their level of fitness. At the same time, the plan also provides more advanced practitioners of yoga, and patients who are relatively fit, with options for asanas that will further enhance their heart health.

Throughout the program, participants are reminded of the importance of including all three of these yoga practices – breathing, meditation, and poses – to optimize the results of their efforts. Readers are also cautioned to consult with their physicians and healthcare providers prior to and during their participation in the 30-day program. In addition to the instructions provided in the text for the program, participants will learn about digital devices and home health care aids – such as blood pressure kits – that will be useful both in monitoring their progress and alerting them to potential health problems.

Ultimately, the comprehensive approach of this program helps readers address current health challenges and cultivate habits for lifelong heart disease prevention and management. Through dedicated practice, participants can strive toward a life free from cardiovascular illness in a state of health that lasts far beyond the initial 30-day plan presented in this program.

*PLEASE NOTE: The Introduction to the 30-Day Heal Your Heart with Yoga Program can be found at the end of the sample chapter on hypertension which follows.*

## Sample Chapter

### CHAPTER 3: Yoga for High Blood Pressure

As a marketing manager in her 40s with two small children, Tara leads a fulfilling but often hectic life. Her days are packed with work meetings, and she constantly juggles family responsibilities – from dropping her kids off at school in the morning to caring for her aging mother in the evening. During a routine health check-up, however, Tara gets news she never expected: “You have high blood pressure,” her doctor announces. “It’s Stage One hypertension.”

Initially, Tara can hardly believe the diagnosis because she’s relatively young and has no major health problems. However, reality gradually sinks in as her doctor explains the results from her blood pressure test. In some ways, Tara learns she’s fortunate, since many people do not know they have hypertension until they land in the emergency room with a heart attack or stroke. In fact, this disease manages to hide so well, the World Health Organization calls it a “silent killer” – because hypertension catches millions of people unaware as it slowly exacts a deadly toll on their bodies.

To avoid the devastating effects of untreated high blood pressure, Tara’s doctor tells her she must pay attention to this early-warning diagnosis and take steps to prevent her condition from becoming worse. She receives the conventional medical advice often given to the 122 million people with hypertension in the U.S.: eat a healthy diet, cut back on salt and caffeine, and get regular exercise. Since she doesn’t smoke and hardly drinks alcohol, Tara is already in compliance with the recommendations on those issues from the list of guidelines developed by the International Society of Hypertension for managing high blood pressure. *[See Appendix for the complete list of guidelines]* Tara realizes she needs to get back to her daily walks and do more to reduce stress, one of the key drivers of hypertension. She promises her doctor she’ll start following the ISH guidelines and plans to enlist other family members in caring for her mother to relieve some of her stress load.

And...Tara could add one other health practice to help manage her hypertension and prevent future heart problems: yoga.

#### RECOGNIZING YOGA’S ROLE IN REDUCING HIGH BLOOD PRESSURE

While patients like Tara may not often hear about the advantages of practicing yoga, an increasing number of reputable research studies show this ancient health system can have a distinctly positive effect on high blood pressure.

For instance, researchers analyzed results from 49 controlled trials involving more than 3,500 people in a report published in the Mayo Clinic Proceedings. They found that blood pressure readings went down at almost double the rate for study participants who practiced yoga three times per week compared to those who did not participate in yoga sessions.<sup>i</sup>

Another study involved patients with a median age of 46, like Tara, who took part in yoga practices once a week. This observational study, published in BMC Public Health in 2022 involved more than 1,300 “yoga-exposed patients.” It found that those who practiced yoga had an 85% increase in the odds of maintaining normal blood pressure compared to non-participants.<sup>ii</sup>

For many heart patients, yoga may also offer a pathway for preventing complications and decreasing the need for multiple medications to control their disease. Typically, four out of five patients in the U.S. with hypertension are treated with prescription medications. However, research at a hospital in India found that yoga can reduce the dosage and, in some cases, even the need for these medicines. Published in the journal *Advances in Integrative Medicine*, the study reported that after a 15-day routine that included daily yogic exercises, meditation, relaxation, and other healthy practices, 56% of patients achieved normal blood pressure. In addition, 83% were able to cut their antihypertensive medication dosage in half. Interestingly, 10% could withdraw from their medications completely while maintaining normal blood pressure levels.<sup>iii</sup>

These intriguing studies attest to yoga's beneficial health impact on hypertension. But how is it possible for yoga to produce that impact? To answer that question, it's helpful to first understand what high blood pressure is, how it's measured, and how it affects the body.

## **UNDERSTANDING HIGH BLOOD PRESSURE**

In addition to providing a basic overview about the problem of high blood pressure, this section will give you useful information about how it's measured as well as ways to reduce the health risks associated with hypertension.

### ***What is high blood pressure?***

Imagine you are living on the 50<sup>th</sup>-floor of a Manhattan skyscraper. To get water to such heights, you rely on a powerful pump that pushes the water up through the building when the electricity is on. Similarly, your heart functions like this pump. When it receives electrical signals, it activates and contracts, pumping blood through your body.

You can compare the blood within your body to the water circulating through an extensive network of pipes in the building. This network includes your arteries, veins, and capillaries – a network so vast it totals 60,000 miles. Like the pump in your building, the heart ensures the water keeps moving in a steady flow. This steady column of blood flowing through your arteries exerts pressure on the walls of those arteries – just as water flowing through your building exerts pressure on the pipes carrying it. Stress, a fat-rich diet, lack of exercise, and other factors, such as aging, can cause changes to the walls of your arteries, sometimes referred to as “hardening” of the arteries. These changes can lead to hypertension – high blood pressure. With time, the elasticity of the blood vessels deteriorates. Like inflexible lead pipes, your arteries become less distensible, which means they lose the ability to expand, becoming less capable of adjusting to the pressure of your blood flow. Multiple complications can then arise in all the vital organs that these arteries supply, including the brain, eyes, kidneys, and critically, the heart.

Moreover, continued insults from having a fat-laden diet or one that includes excessive carbohydrates cause inflammation in these arteries, giving rise to complications like heart attack, embolic or thrombotic stroke, and peripheral arterial disease. Since your arteries supply nutrition to all the body's vital organs, inflammation and blockages in them lead to damaged organs. Smoking, high cholesterol levels, and uncontrolled diabetes are other factors contributing to these blockages. Just like the pump in your building must work harder to deliver water when there are obstructions in the pipes, your heart has to work harder when there are blockages in your arteries, leading to potential health problems, including much-dreaded heart failure. The problem is that these damages continue to mount while remaining undetected until they are severe enough to cause stroke, heart, or kidney failure. This hidden process is why hypertension has earned the nickname of the “silent killer.” Rarely, severe hypertension may cause headaches, shortness of breath, or nosebleeds. Still, these signs are not specific and usually don't occur until high blood pressure has reached a severe or life-threatening stage.<sup>iv</sup>

Quite commonly, many people do not fully recognize the existence of hypertension in their bodies until a catastrophic health complication occurs. They are either incidentally diagnosed with high blood pressure by a doctor during a regular physical exam or when they experience a stroke, heart attack, or heart failure.

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### **When a stroke strikes...**

*Anna and Tom lived in a coastal town outside Boston where the quiet rhythm of the waves seemed to echo the calmness of their lives together. Tom, with his active energy and robust laughter, was the life of their small community. With her warmth and nurturing presence, Anna complemented him perfectly, balancing their relationship with gentle grace. However, a silent, invisible storm was gathering force beneath this idyllic existence. Seemingly out of nowhere, Tom began feeling unusual fatigue that began to overshadow his usual zest for life. One morning, he quietly lost power in his left arm and leg during breakfast. Anna became alarmed when she noticed the drooping muscles on one side of his face and couldn't make sense of his slurred speech. Fortunately, an ambulance responded to her 9-1-1 call within minutes and took Tom to the hospital. After a series of rapid assessments and anxious waiting, a new term entered their lives: ischemic stroke.*

*The doctors explained that Tom's undetected, long-standing high blood pressure had caused the blood vessels in his brain to narrow and become clogged. That cut off the flow of blood to his brain cells, resulting in his stroke. High blood pressure leads to ischemic strokes, like the one Tom experienced, because it damages the inner lining of blood vessels, and that narrows arteries.*



*High blood pressure also contributes to a different type of stroke – called hemorrhagic strokes – because, over time, it strains blood vessels to the point where they rupture. When a blood vessel ruptures in or near the brain it causes a hemorrhagic stroke. About 87 percent of the 795,000 strokes patients experience in the U.S. are the ischemic type and an estimated 13 percent are hemorrhagic strokes.<sup>v</sup> While both can be debilitating, hemorrhagic strokes often pose a more immediate threat to life.*

*In many ways, Tom was indeed fortunate. The ambulance rushed him to the hospital without delays and he quickly received high-quality medical care. Then, too, when he began to work on his recovery, he began practicing yoga as part of his rehabilitation program. Slowly, over time, and with persistent effort in his physical therapy and yoga sessions, Tom regained much of his former health which allowed he and Anna to enjoy many more years together.*

*While more large-scale clinical research is needed to examine the use of yoga in rehabilitation for stroke patients, emerging evidence points to its benefits. A study published by the American Stroke Association, for instance, reported that stroke patients taking part in yoga sessions improved their balance in ways researchers called “statistically significant and clinically meaningful.”<sup>vi</sup> This improvement in the ability of patients to regain their balance – combined with the proven effectiveness of yoga in lowering blood pressure rates – could open new avenues of healing for the 15 million people worldwide who suffer from strokes.<sup>vii</sup>*

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Because the condition of hypertension is asymptomatic – that is, free of symptoms that you would likely notice or recognize in daily life – it's essential to regularly monitor your blood pressure. Besides having a health professional conduct a blood pressure test, I would strongly recommend purchasing an inexpensive sphygmomanometer (blood pressure measuring instrument) that can be used at home. Many digital ones are accessible to everyone, including the older population. With the increasing popularity of digital devices, some watches measure blood pressure. However, the sensitive ones are costly, while the less expensive versions are likely to yield erroneous results – so a reliable at-home blood pressure test may be a better investment.

But what do those numbers on the blood pressure test mean? Let us find out.

### *What do blood pressure readings mean?*

Almost any time you visit a healthcare facility – whether it's a doctor's office, a hospital, or a walk-in clinic – it's likely that a nurse or a staff member will take your blood pressure. They will place a specialized cuff around your arm, inflate it, and then read numbers on a gauge or monitor. These numbers reveal whether your blood pressure falls within normal ranges or not.

Blood pressure test results are presented as two numbers – one placed over the top of the other. The top number is “systolic,” and the bottom is “diastolic.” To understand these two concepts, it helps to remember that the heart is a muscle that is continuously contracting and relaxing. The systolic reading represents the pressure exerted as the heart contracts and pushes blood into the rest of your body. When the heart relaxes between beats, that reveals the diastolic pressure level.

Your blood pressure varies throughout the day depending on your activity levels, stress, and other factors, such as caffeine intake. For most adults, a normal resting blood pressure is one where the systolic blood pressure reading is below 120 mm Hg and the diastolic level is less than 80 mm Hg – usually expressed as 120/80 mm Hg (The abbreviation “mm Hg” refers to “millimeters of mercury,” which is the scientific notation for a blood pressure measurement.)

Elevated blood pressure is diagnosed when systolic pressure ranges from 120-129 mm Hg and diastolic remains below 80 mm Hg. According to the American College of Cardiology (ACC) and American Heart Association (AHA), patients are considered to have Stage 1 high blood pressure (hypertension) when their systolic pressure measures from 130 mm Hg to 139 mm Hg and their diastolic pressure reads between 80 and 89 mm Hg. Stage 2 hypertension is diagnosed when the systolic pressure is 140 mm Hg or higher and diastolic pressure is 90 mm Hg or above. Anyone experiencing blood pressure readings higher than a systolic pressure above 180 mm Hg and a diastolic reading above 120 mm Hg is considered to be in a hypertensive crisis and should immediately seek medical care. Such high pressures can lead to the rupture of blood vessels in the brain, resulting in a brain hemorrhage which has a very serious prognosis and can even lead to death. (See Figure 1).

Figure 1: Blood pressure categories by American Heart Association

BLOOD PRESSURE CATEGORY	SYSTOLIC mm Hg (upper number)		DIASTOLIC mm Hg (lower number)
NORMAL	LESS THAN 120	and	LESS THAN 80
ELEVATED	120 – 129	and	LESS THAN 80
HIGH BLOOD PRESSURE (HYPERTENSION) STAGE 1	130 – 139	or	80 – 89
HIGH BLOOD PRESSURE (HYPERTENSION) STAGE 2	140 OR HIGHER	or	90 OR HIGHER
HYPERTENSIVE CRISIS (consult your doctor immediately)	HIGHER THAN 180	and/or	HIGHER THAN 120

Because taking a blood pressure reading is routine and common, it may be hard to believe the condition of high blood pressure goes undetected. There are many reasons, however, why so many people around the world do not realize they have high blood pressure until serious problems emerge. For one thing, the lack of regular, affordable medical examinations is an important factor, particularly for people without medical insurance or inadequate coverage. In poor and middle-income countries, many households often cannot afford appropriate medical care. However, the lack of public education is a contributing factor, too. Most countries do not enforce public education campaigns to detect non-communicable diseases or health problems like hypertension, unlike the approach taken for infectious diseases like bird flu or COVID.

In addition, there's a phenomenon called "white coat syndrome" – which is what happens when a patient's blood pressure shoots up to a level that's higher than normal because they're in a doctor's office or other medical setting where they feel stressed about interacting with health care professionals who have traditionally worn white coats. The blood pressure levels for these patients may be in the normal range at home, but not when they're being examined in a medical environment – so it can be hard to determine whether these patients truly have hypertension. There are only two ways to determine if such individuals really suffer from hypertension or not. The first and easier one is for heart patients to take their own blood pressure readings at home at least three times a day for two weeks. If most of these numbers are within the normal range, they probably do not have hypertension. The other more scientific alternative – but definitely costlier – is to have a physician order what is known as "Ambulatory BP (blood pressure) measurement" which is a device that will continuously measure the blood pressure throughout the day. The report from that test is read at the doctor's office to determine if the person is really hypertensive or just has the white coat syndrome! Regardless of how hypertension manages to hide, it's important to find it and then take steps to reduce it – such as through the practice of yoga.

### ***Recognizing -- and reducing -- the risks of hypertension***

In its 2013 report, *A Global Brief on Hypertension*,<sup>viii</sup> the World Health Organization (WHO) identified several factors that put a person at risk for high blood pressure. One of those factors – individual behavior – includes consuming excessive salt and fat while not eating adequate amounts of fruits and vegetables. Drinking alcohol, smoking, being sedentary, and mismanaging stress were also listed among the behavioral risk factors for this disease. In addition, obesity, diabetes, and high cholesterol levels are further contributors to hypertension, as are genetics and age. Pregnancy, for some percentage of those who bear children, may also create a risk for high blood pressure if they develop a condition called preeclampsia. As with any health problem, socioeconomic factors, such as limited incomes or housing insecurity, can influence a person's behavior – meaning the detection and treatment of hypertension may be delayed for those with fewer resources or restricted access to health care.

While it's essential to identify the factors that put your health at risk, it's critical to reduce them if you've been diagnosed with high blood pressure. Fortunately, as noted in the WHO report, many risk factors for hypertension are shaped by individual behavior – which means they are the ones you have the most power to change.

However, before making those changes, you should consult your doctor or healthcare provider first. Do not adjust, eliminate, or stop any medications you take without a professional consultation. With that precaution in mind, the steps below highlight a few behavioral changes you can make to help reduce the impact of high blood pressure on your body. For a full list of heart health recommendations, see the “International Society of Hypertension Guidelines for Managing High Blood Pressure” in the Appendix.

### **Steps for reducing high blood pressure**

- *Reduce sodium/salt* – Reducing sodium intake can prevent fluid retention, which increases blood volume and pressure.
- *Eat a healthy diet* – Including more fiber in your diet by adding wholegrain foods and increasing the number of fruits and vegetables you eat will also help lower blood pressure. You'll find a more in-depth discussion of diet and nutrition in Chapter 7.
- *Moderate caffeine and alcohol intake* – I recommend that heart patients avoid over-indulging in coffee, tea, or alcohol to keep hypertension in check.
- *Stop smoking* – The “nicotine spike” that accompanies smoking tobacco can raise blood pressure levels. Smoking also damages the lining of your arteries, leading to a build-up of fatty material (atheroma), which narrows the artery and makes the heart pump harder, leading to a higher blood pressure reading.
- *Lose weight* – Being overweight or obese puts extra stress on your heart, increasing the risks of any number of health problems, including high blood pressure. The authors of one study published in the Harvard Health Publishing blog contend that yoga can help you burn calories, as well as increase your muscle mass and tone.<sup>ix</sup> Further, yoga may reduce joint pain, allowing you to exercise more and increase your daily activities. These benefits of yoga can greatly enhance your ability to lose weight or manage it.
- *Get moving* – You don't have to run marathons, but walking for even 20 minutes daily can increase your ability to avoid heart problems.
- *Practice yoga* – One of the best ways to reduce the risks of developing hypertension – or possibly reversing its detrimental effects – is through practicing yoga. Reading on to the section on “Healing Hypertension with Yoga” will help you understand more about how this ancient science can benefit your body.

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### ***Yoga or Zumba?***

*For decades, heart patients have been advised to move more and increase aerobic activities to improve their health. As it turns out, yoga is a more effective physical activity for reducing high blood pressure than aerobic exercise or Zumba! One study<sup>x</sup> observed that participants doing yoga had blood pressure rates that were lowered at three times the amount of those engaging in other types of physical activities. The authors of the study reported that the drop in blood pressure readings was most significant among participants who practiced yoga, followed by those who performed Zumba dance, and finally among aerobics participants. It should also be noted that all three activities produce no side effects – unlike the medical protocol of using drug interventions for prolonged periods. They further proposed that yoga should become integral to primary care in preventing hypertension and its associated diseases. In my practice, I also do not recommend medications in cases of mild Stage I hypertension; rather, patients are advised to undertake aggressive lifestyle changes, including dietary changes, engaging in yoga, and undertaking meditation for stress relaxation. If practiced regularly, these changes can reduce or eliminate drug therapy in some instances, thus enabling patients to avoid potentially adverse effects to drug therapy. Please remember, though, that no one should stop their heart medications without close consultation with their healthcare providers.*

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### **HEALING HYPERTENSION WITH YOGA**

Among the numerous health benefits attributed to yoga, its effect on blood pressure management is one of the most extensively researched areas. For instance, a landmark study published in BMC Public Health<sup>ii</sup> found that individuals practicing yoga regularly experienced significant reductions in systolic and diastolic blood pressure compared to those who did not. Similarly, research has also highlighted yoga's positive effects on heart rate variability, a key indicator of heart health and stress resilience<sup>xi</sup> These evidence-backed benefits for heart health, combined with its ability to harmonize the mind and body, make yoga a valuable ally in the management of high blood pressure and other heart conditions.

Now, I will explain how yoga works within your body to produce these positive health effects.

#### ***How does yoga help lower high blood pressure?***

Conventional medicine recognizes the importance of reducing stress to stabilize blood pressure levels, and numerous studies have documented yoga's effectiveness in doing just that. Central to its effect on hypertension, yoga seems to modulate the body's neural responses. This modulating action takes place through both “Top-Down” and “Bottom-Up” mechanisms. (The terms for these mechanisms roughly describe a bidirectional process that runs between the brain and other parts of the body, including the cardiovascular and immune systems – referred to in some circles as the mind-body connection.)

### ***How does this happen?***

The “Top-Down” mechanism involves calming the mind through meditation and focused breathing, which in turn helps lower the body’s stress responses and blood pressure. Conversely, the “Bottom-Up” mechanism uses physical poses and breathing exercises to trigger bodily changes that signal the brain to relax, helping to reduce stress. Together, these mechanisms explain how yoga integrates mind and body health, each influencing and enhancing the other.

Essentially, yoga activates the parasympathetic nervous system (PSNS) – often referred to as the “rest and digest” system, which helps calm the body and promote relaxation. Yoga enhances the activity of this “rest and digest” phase while simultaneously lowering the “fight or flight” responses of the sympathetic nervous system (SNS), which prepares the body for rapid, intense action during stress. This dual action reduces your biological reactions to various stresses in life – whether you're dealing with traffic or an upsetting family argument. By incorporating deep breathing exercises, yoga helps increase PSNS activity, promoting an overall sense of well-being. It also helps lower the secretion of the stress hormone cortisol while it increases alpha waves in the brain – all of which leads to lower blood pressure levels. To document this effect, a randomized controlled trial <sup>xi</sup> of 12-week yoga therapy examined the cardiovascular effect of yoga on heart patients. The study showed that yoga helps in modulating heart rate variability (HRV) by improving the parasympathetic tone, reducing the sympathetic tone, and lowering blood pressure.

Research has also shown that one month of yoga practice can increase blood flow to the brain. <sup>xii</sup> Why is that important in terms of your heart health? Increased blood flow to the brain helps to address your levels of stress and anxiety by changing brain neurochemistry which then helps reduce hypertension. Moreover, yoga may counteract the stiffness in arteries that can develop with age while improving the overall capacity of the circulatory system to function properly, making it an effective strategy for managing high blood pressure.

Yoga's inherent ability to alleviate stress offers cascading benefits, from uplifting mood and stabilizing the nervous system to balancing hormones and reducing inflammation. By engaging in this ancient practice, rooted deeply in the philosophy of holistic well-being, your body will be better able to fend off the health challenges of modern life as well as the “silent killer” of high blood pressure.

### ***Practicing yoga safely***

Now that you know a bit about how high blood pressure affects your health – and how yoga can help heal that condition – it's time to look at the safe and practical steps for engaging in actual yoga practices. Before embarking on a yoga journey, it is crucial to consult with healthcare professionals. This step ensures that your yoga practice is tailored to your specific health conditions and takes into account any personal limitations or precautions. Remember, never stop ongoing medical therapy without direct advice from your medical doctor, as suddenly stopping therapy can cause disastrous consequences.

### For individuals and heart patients: Best yoga practices

- *Listen to your body* – Pay attention to how your body feels when engaging in yoga practices. If you experience any discomfort or pain, gently exit the pose (asana) or stop the exercise.
- *Start slowly* – Begin with short sessions and gradually increase the duration as your body adapts to the new practices.
- *Don't force movements* – Do not attempt aggressive poses that are beyond your current ability. For example, if you have a large abdomen and cannot touch your feet, don't force your body to go beyond this limitation. Moving mindfully and gradually increasing your ability to move is better than trying to force progress in your practice.
- *Practice regularly* – For the best results to improve your health, incorporate yoga practices into your daily routine and create a consistent schedule that fits your lifestyle.

#### ***Heart Patients: Yoga Practices to Avoid***

*In addition to following the general guidelines for best yoga practices stated above, heart patients also need to be mindful of these special precautions:*

- *Avoid postures where your head drops below your heart level. Specifically, refrain from Sarvangasana, Halasana, Shirshasana (Head stand) and its variants, as, in these poses, the head is positioned significantly below the heart.*
- *Refrain from "inverted" poses and breathing techniques that induce hyperventilation.*
- *Do not engage in breathing rapidly or primarily through the right nostril, as these can elevate blood pressure.*
- *Bhastrika Pranayama should be approached with caution, as it might lead to hypertension unless executed very gently.*
- *Avoid any Pranayama practice that involves retaining the breath, known as Kumbhak.*

### For healthcare professionals: Recommending yoga to patients

- *Assess the patient's overall health* – Before recommending yoga, evaluate the patient's physical condition, considering factors such as mobility, flexibility, and any existing health issues that might affect their ability to safely perform yoga exercises.
- *Consider the patient's particular heart condition* – Patients with controlled hypertension and those with specific heart conditions may benefit from yoga's calming and stress-reducing effects. However, patients with severe cardiovascular disease or uncontrolled blood pressure require careful consideration and may need to modify yoga practices. Similarly, patients with heart failure and a low ejection fraction may be able to perform some seated yoga postures, but more aggressive poses may not be suitable for these patients. (Note: A “low ejection fraction” or low heart EF, typically refers to a measurement of the ability of the heart’s left ventricle to pump blood.)
- *Understand the patient's lifestyle* – Assess whether the patient is likely to be receptive to yoga as a form of therapy. Consider their openness to complementary therapies, their current stress levels, and their willingness to commit to a regular practice.
- *Monitor progress and adjust recommendations* – Schedule follow-up appointments to discuss the patient's experience with yoga, including any difficulties and perceived benefits. Adjust recommendations based on the patient's feedback and health progress.

- *Expand knowledge about yoga therapy.* Study the use of yoga therapy as part of a clinical integrative medical regimen for heart patients. Develop specialized knowledge about the science of yoga to enhance the array of treatment options available to patients.

#### For yoga teachers: Working with students who have heart conditions

- *Foster open communication* – Encourage students to share their health conditions, including any specific diagnoses or recommendations from their healthcare providers. This dialogue will help you tailor the practice to their needs and limitations.
- *Start gently* – Begin with gentle poses and sequences that gradually warm up the body without causing strain on the heart or vascular system. Avoid starting classes with intense or rigorous practices that could spike blood pressure.
- *Modify or avoid certain poses* – Offer modifications and props to make poses more accessible and comfortable. Be mindful of poses that significantly elevate the heart above the head that may not be suitable for everyone. Intense inversions or backbends may need to be highly modified or avoided altogether.
- *Promote relaxation* – Emphasize slow, deep breathing techniques that promote relaxation and stress reduction. Be cautious with pranayama practices that involve breath retention or rapid breathing, as these can be inappropriate for individuals with heart conditions. Incorporate restorative poses and guided relaxation at the end of practice to help lower blood pressure and reduce stress. Practices like Yoga Nidra can be particularly beneficial for promoting deep relaxation.
- *Encourage breaks* – Remind students to listen to their bodies and rest when needed.
- *Enroll in specialized courses* – The training that most yoga teachers undergo does not qualify them to become a yoga therapist within a clinical medicine practice. Explore ways to increase clinical knowledge and enroll in specialized courses that are necessary for becoming a yoga therapist.

#### ***Yoga Practices to Manage High Blood Pressure***

Yoga, with its rich tradition of promoting physical, mental, and spiritual well-being, offers a series of practices that can be particularly beneficial for anyone who wants to manage their blood pressure. The following section presents basic yoga poses (asanas), breathing exercises (pranayama), and meditation practices (dhyana), including guided visualization and mindfulness techniques, that you can incorporate into your life to reap the benefits from yoga that research shows can improve your heart health. It is important to understand that asanas alone, as commonly practiced or taught, fail to provide the full range of health benefits that are available through combining them with breathing exercises and meditation techniques and engaging in all of these practices together. If you have not done yoga before, you may want to adopt only one or two of these practices initially and then gradually add the others to your daily routine. Or, if you have experience with yoga, you might include all of them as part of your health regimen. If you are participating in yoga classes, you can discuss these practices with your teacher to find the best ways to adapt them to your current health status. No matter your experience level, it is essential to take the precautions outlined in the “Practicing Yoga Safely” section before beginning any of these practices – and, as always, consult with your physician first. In addition to the practices presented in this chapter, the “30-Day Heal Your Heart with Yoga Program” found in the Appendix offers a full range of poses, breathing exercises, and meditation techniques that provide a blueprint for practicing yoga as part of your heart-healthy lifestyle.



## Yoga Poses (Asanas)

### 1. Tadasana (Palm Tree Pose)

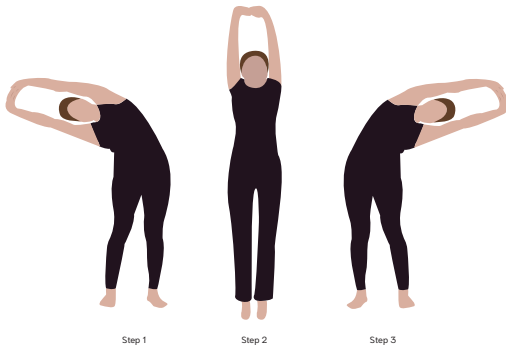


'Tada' means palm tree or mountain. This asana teaches one to attain stability and firmness and forms the base for all the standing asana.

#### Technique

- Stand with feet 2 inches apart.
- Inhale, lift your arms up to the shoulder level in the front.
- Interlock the fingers, and turn the wrist outwards.
- Now inhale, raise the arms up above your head.
- Raise the heels off the floor and balance on the toes

### 2. Tiryaka Tadasana (Swaying palm tree pose)

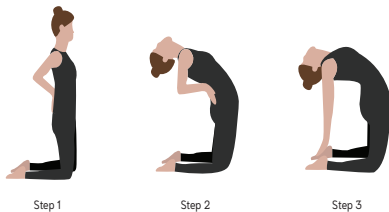


'Tiryaka' means Swaying, 'Tada' means Palm Tree. Swaying Palm Tree pose is known as Tiryaka Tadasana.

#### Technique:

- Stand upright with feet up to shoulder-width apart.
- Raise your arms above your head and interlock your fingers.
- Keeping your gaze forward, slowly bend your body to the left from the waist.
- Hold this position with normal breathing.
- Return to the center and then repeat the bend on the right side.

### 3. Ustrasana

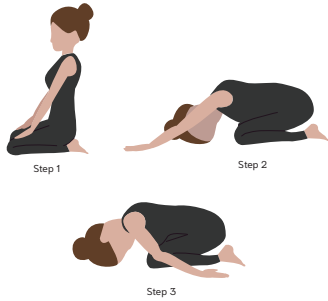


'Ustra' means camel. The final version of this asana resembles the hump of a camel. In this version, only the first stage (half) of the asana is being practiced.

#### Technique

- Stand on your knees with shoulder width apart.
- Place the hands on the hips with fingers pointing downwards.
- Keep the elbows and shoulders parallel.
- Bend the head back and stretch the neck muscles; inhale and bend the trunk backwards as much as possible. Now exhale and relax.
- Keep the thighs perpendicular to the ground.
- Remain in the posture for 10-30 seconds with normal breathing.
- Return with inhalation; sit in Vajrasana (kneeling as shown in Child's Pose below).
- Stretch both the legs forwards with hands rested on the floor backwards.

#### 4. Child's Pose (Balasana)

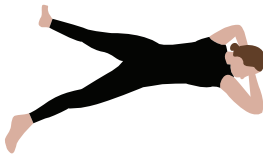


'Bala' means child, and "asana," which refers to pose or seat.

##### Technique

- Begin on your hands and knees, sink back through your hips to rest them on your heels.
- Hinge at your hips to fold forward, extending your arms out in front of you or alongside your body.
- Rest your forehead on the mat, and breathe deeply, allowing the back to stretch and the body to relax.
- Hold for 1-3 minutes, focusing on deep, slow breathing.

#### 5. Makrasana



'Makara' means crocodile. In this asana, the body resembles the crocodile, hence the name.

##### Technique

- Lie down on your stomach with feet wide apart, toes pointing outward.
- Bend both the arms and place the right palm on the left palm.

#### 6. Bhujangasana



'Bhujanga' means snake or cobra. In this asana, the body is raised like the hood of the snake.

##### Technique

- Lie on your stomach, head resting on hands, body relaxed.
- Extend your legs together and keep arms stretched alongside your body.

Sarala Bhujangasana (Simple Cobra Pose):

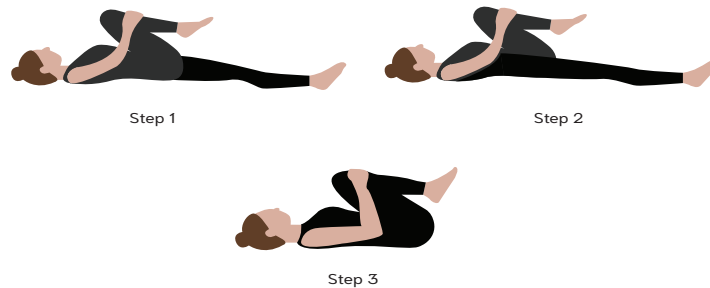
- With your forehead on the ground, place your hands beside your body, palms down.
- Inhale slowly and lift your head and chest up to the navel level, keeping hands and elbows static.
- Hold comfortably, then gently lower back down.

Bhujangasana (Cobra Pose):

- Position your palms next to your chest, keeping elbows raised.
- Inhale and lift your head and chest to the navel level, keeping elbows bent and parallel.
- Maintain this posture for 10-30 seconds with normal breathing.
- Exhale, lower your forehead to the ground, and relax in Makarasana (Crocodile Pose).

**Note:** Keep legs firm to prevent strain on the lumbar spine.

## 7. Pawanmuktasana

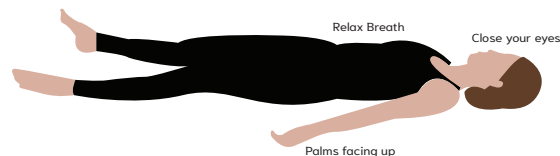


Pavana means wind and mukta means to release or to make free. As the name suggests, this asana is useful in removing wind or flatulence from the stomach and intestines.

### Technique

- Lie down flat on the back.
- Bend both the knees.
- Exhale, bring both the knees towards the chest.
- Inhale, interlock the fingers and clasp the shin below knees.
- Exhale, raise the head till your chin touches the knees and relax. This is Pawanamuktasana.
- Bring the head back to the ground.
- While exhaling, bring the legs back to the floor.
- Rest in Savasana

## 8. Savasana



‘Sava’ means dead body. The final position in this asana resembles a corpse/dead body.

### Technique

- Lie down on your back with arms and legs comfortably apart.
- Palms facing upward, eyes closed.
- Relax the whole body consciously.
- Become aware of natural breath and allow it to become slow and shallow
- Remain in the position till you feel refresh and relaxed.

## **Breathing Exercises (Pranayama)**

### **1. Complete Breath Technique (Yogic Breathing)**



- Sit comfortably or lie flat on your back. Place one hand on your chest and the other on your belly.
- Breathe in deeply through your nose, allowing your diaphragm (not your chest) to expand and rise.
- Exhale slowly through your mouth or nose, feeling the belly fall.
- Continue for 5-10 minutes, focusing on slow, deep breaths that fill the diaphragm.

### **2. Alternate Nostril Breathing (Nadi Shodhana)**



- Sit in a comfortable seated position with your spine straight.
- Place your left hand on your knee and your right thumb on your right nostril to close it.
- Inhale deeply through your left nostril, then close it with your ring finger.
- Open your right nostril and exhale slowly, then inhale through the right nostril.
- Close the right nostril and exhale through the left. This completes one cycle.
- Perform 5-10 cycles, focusing on smooth, even breaths.

### 3. Bhramari Pranayama



Hand mudra variation 1



Hand mudra variation 2

Bhramari pranayama, also known as the "Bee Breath," is a calming breathing technique in yoga.

- Sit comfortably with a straight spine.
- Close your eyes to minimize distractions.
- Use your thumbs to gently close your ears.
- Place your index fingers on your forehead and the rest of your fingers over your eyes.
- Inhale deeply through your nose.
- Exhale slowly while making a steady humming sound like a bee.
- Repeat this process for 5 to 10 rounds.
- Focus on the humming sound to enhance calmness.
- Conclude by sitting quietly for a few moments before opening your eyes

### **Meditation Techniques (Dhvana)**

#### **1. Guided Visualization**

- Sit or lie in a comfortable position. Close your eyes and take a few deep breaths to relax.
- Visualize a peaceful scene, such as a quiet forest or a serene beach. Imagine all the details, the sounds, the smells, and the sensations.
- Focus on this scene for 5-10 minutes, allowing your mind and body to absorb the tranquillity.

#### **2. Mindfulness Meditation**

- Find a quiet space and sit comfortably with your eyes closed.
- Pay attention to your breath, noticing the sensation of air moving in and out of your body.
- When your mind wanders, gently bring your focus back to your breath.
- Practice this for 5-20 minutes daily, gradually increasing the duration as you become more comfortable with the technique.

## **30-Day Heal Your Heart with Yoga Program**

### **Introduction**

Welcome to the 30-Day program!

By participating in it you will be taking major steps towards healing your heart with yoga.

This program offers you an opportunity to connect the findings of medical researchers with the benefits of following a traditional trifold yoga plan to help reduce stress, lower blood pressure, and control diabetes, as well as to prevent heart attack and strokes. Heart disease remains the number one killer in the US – as it has been for more than one hundred years now – and it takes the lives of twice the number of people as cancer which is the second most common cause of death in this country. Four out of five of these heart-related deaths are due to heart attack and stroke – with high blood pressure and diabetes being among the most important risk factors for these two life-threatening conditions. Yoga also decreases inflammation, and improves brain function – important goals for anyone experiencing heart and diabetes-related health problems, or hoping to prevent them. If you are currently healthy and wish to stay out of hospitals and doctors' offices throughout your lifetime, this plan is for you too!

In addition, the program makes it easy to incorporate the multifaceted practices of yoga into your daily life. It also offers you the option of using popular technological devices and apps to monitor your health and measure your progress throughout the 30-day plan and during the rest of your life to remain healthy and disease free.

Given that heart health problems emanate from multi-dimensional sources – including high-stress lifestyles, poor diets, sleep deprivation, and other unhealthy conditions common to our supercharged fast-paced world – their cure must involve a comprehensive, holistic approach to healing.

Yoga does that.

For heart patients in particular, this ancient science attends to the underlying causes of their health problems because it goes beyond the impermanent fix of surgery or the finite effectiveness of medications.

Yoga practices help to repair – and sometimes reverse – the damage of cardiovascular diseases because they exert a positive effect on the brain-body environment in these ways:

- \*Meditation (dhyana) – promotes the neuroplasticity of the brain while it also prevents the brain from releasing chemicals that lead to inflammation – a leading contributor to heart disease.

- \*Breathing exercises (pranayama) – enhance your body's ability to tap into its relaxation response to counterbalance excessive “fight or flight” reactions that underlie the stress that damages your heart. They also help stabilize your heart and reduce the risk of sudden cardiac arrest, the largest cause of natural death in the U.S..

\*Poses (asanas) – boost your overall cardiovascular fitness and health while they also improve your heart’s capacity to function.

The benefits of the three yogic practices described here – meditation, breathing exercises, and poses – are separated individually for the purposes of discussion and scientific inquiry. But in reality, they are all connected through an integrated system designed to improve your wellbeing.

It is important, therefore, for you to recognize that these three practices act synergistically – that is, they all work harmoniously together to help heal your body. It’s also necessary to let go of the widespread notion that yoga is simply a matter of twisting your body into exotic shapes. While yoga asanas are a strong component of this venerated science, they are not the totality of it. To get the most out of the 30-Day Program, then, you will be combining breathing exercises and meditation along with your asana work as part of your health regimen.

As you continue to engage in these yogic practices, you may eventually want to explore the other five pillars of yoga (as described in Chapter 2). Special attention should also be given to your diet and you may also wish to adopt the yogic approach to nutrition (see Chapter 7).

Whether you delve more deeply into the traditions of yoga or not, you are well-advised to follow the commonsense advice about cardiovascular health offered by respected institutions such as the U.S. Centers for Disease Control and Prevention and organizations like the American Heart Association. Virtually everyone recognizes that heart patients should quit smoking, avoid excess salt and caffeine in their diets, and exercise regularly. If someone goes through heart surgery, takes medications to lower cholesterol, or receives a pacemaker, they are not doing their health any favors if they continue to smoke, eat a high-fat diet, drink excessively, or avoid exercise. The same holds true for someone who has not yet developed full-blown cardiovascular problems, but may be at risk for them. Taking a yoga class at a gym once and awhile is not going to counteract such unhealthy practices.

On the other hand, if you are someone who is ready to embark on a life-affirming healing journey, the 30-Day Program to Heal Your Heart through Yoga is the place to start.

**Note: The complete 30-Day Program is attached as a separate document within this proposal.**

## ENDNOTES FOR SAMPLE CHAPTER

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