KAVITHA CHINNAIYAN, MD

"A must-read for anyone who wants to truly understand what it means to live whole-heartedly-regardless of one's state of health."

-Christiane Northrup, MD. New York Times bestselling author of Goddesses Never Age

Heart of Wellness



Bridging Western and Eastern Medicine to Transform Your Relationship with Habits, Lifestyle, and Health

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Foreword

Dr. Chinnaiyan offers an entirely new approach to "wellth" and illness. She calls the path Bliss Rx, which is a paradigm-expanding approach to health, illness, self, and peace that blends her strong roots in both Eastern tradition and practices and her cutting-edge practice of heart care at a major center. She asks the hard question, "What if we are more than just body and mind?" What if we have a pure light inside—one that radiates bliss, one that has been covered up and hidden by the twists and turns of life but that can be rediscovered to understand and deal with suffering?

I have had the joy of knowing Dr. Chinnaiyan for nearly two decades in my role as an attending cardiologist and teacher. Her potential for greatness was obvious. She raised lovely daughters, developed an excellence in the clinical practice of cardiology and research, and began to teach other trainees to grow to her level of a caring, intelligent, and effective clinician. Not many of us around were aware of the hours she was spending studying and practicing advanced yoga and meditation before and after working the long hours that her trade required.

We are fortunate that she persisted on these demanding paths because her introduction of her six-month program Heal Your Heart Free Your Soul stood out at this shrine of technology. Just a floor above her meetings were millions of dollars' worth of state-of-the-art CT and MRI scanners, ultrasound machines, and complex catheterization laboratories dedicated to exploring the workings and diseases that so commonly affect heart and arteries. At the same time, in her program on the first floor, hearts were being inspected with breath, silence, support, and calm.

Our good fortune is that Dr. Chinnaiyan has now distilled the profound experiences and gains she observed from her courses into a manual that challenges us to look within, slow down, and consider our lives. *The Heart of Wellness* is a paradigm shift in going beyond the body and mind that we are

taught to consider in Western medicine (frankly, much more often the body than the mind). It brings an examination of spirituality and awakening from limitations that often are the root cause of pain and suffering of the heart and entire body.

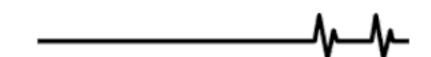
Dr. Chinnaiyan doesn't promise us cures or disease reversal but uses her profound study of Ayurveda, Yoga, and Vedanta to present an opportunity to wake up to the blissfulness of our existence. This process may enhance healing as a side benefit, but it is worth pursuing on its own. This is not a seven-day or four-week radical cure but a life path that can be embraced at any pace at any time.

Although my path has not been as deeply steeped in Eastern traditions as that of my friend and now teacher Kavitha Chinnaiyan, it has included years of yoga and a period of practicing Kundalini yoga. The haunting music of that practice touched me deeply, as did the unusual flows that went on for an hour or more. Of the various chants I was exposed to, none touched me more than the words "I am the light of my soul, I am beautiful, I am bountiful, I am bliss, I am, I am." Dr. Chinnaiyan has written a primer to help us truly accomplish those words—to realize the bliss that is within and to use that bliss to address any health issues we may face. Once in a generation a book appears that defines a new paradigm in its field. *The Heart of Wellness* is that book for our generation. Your copy, like mine, will have corners bent over and pages highlighted to return to.

Joel K. Kahn, MD, FACC, clinical professor of medicine at Wayne State University School of Medicine and author of *The Plant-Based Solution* (Sounds True, 2018)

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Acknowledgments



This book has been the amalgamation of the teachings of many who have graced my understanding of both life and medicine. I'm deeply grateful to the various teachers who sparked my interest in medicine as a young child and to those that gave it shape and momentum in medical school, residency, and cardiology fellowship. I'm fortunate to work with some of the best physicians in my field; they inspire me daily with their compassion, selflessness, and commitment to science and patient care.

I'm humbled to continue to learn from some of the finest teachers of Ayurveda, Yoga, and Vedanta—Swami Chinmayananda, whose writings on Vedanta fueled my fire of longing for truth; Yogani, the founder of Advanced Yoga Practices, who helped shape my understanding of Yoga; Greg Goode, whose teachings on the Direct Path shifted my perspective in a profound and permanent manner; Byron Katie, whose self-inquiry method has brought deeper understanding, joy, and peace to countless patients and participants of my program; Dr. Stuart Rothenberg and Dr. Nancy Lonsdorf of Maharishi Ayurveda, whose delightful and practical teaching of Ayurveda has made it easy for me to incorporate this great science in daily medical practice; and Dr. Sumit Kesarkar, whose teachings on Ayurveda, Yoga, and nondualism continue to shape my spiritual and medical practice. I'm grateful for the many teachers who shape my understanding through their work, books, papers, and talks. Thank you.

My deep thanks go to Dr. Joel Kahn, my dear friend and colleague who guided me in the book-writing process, and to Lisa Hagan, my wonderful agent and friend for her uncompromising support and encouragement during this long and sometimes challenging writing process. I'm indebted to the wonderful team at Llewellyn for their advice that helped shape the format of this book. My special thanks to Angela Wix, my editor, for her insightful comments that helped clarify the message of the book.

Thank you to my wonderful friends who gave me valuable feedback as this book was taking shape, especially Drs. Beena Vesikar, Sarah D. Hashmi, Sridevi Gandrajpalli, Jaya Kumari, and Shylaja Swami. My deep thanks to David Kuttruff, whose feedback helped clarify my writing. Neither the Heal Your Heart program nor this book would have taken shape without the able and efficient help of my dear friend Ann DePetris. Thank you.

My heartfelt gratitude goes to all my patients who show me what medicine is really about. You give me more than I can ever give you—you help me grow as a human through your stories, frailty, courage, and grace. I'm humbled to interact with each of you.

I'm grateful to my parents, Nataraj and Geetha, whose selfless and unconditional love and support cannot be described in words. I love you. My loving thanks to my husband, Arul, who held space for me when I was juggling the roles of a full-time cardiologist, mother, wife, and writer. Thank you to my beautiful daughters, Anya and Annika, who continue to teach me the meaning of love and devotion.

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Introduction

Kim sat across from me, anger and frustration etched on her face. "I can't believe this happened to me. I exercise every single day. I pay attention to every morsel that goes in my mouth. I don't smoke and have only two to three alcoholic drinks per year. All my five siblings are overweight; they all smoke and eat the unhealthiest foods. If anyone should get cancer, it should be one of them, not me."

I sat quietly, listening to her pain-filled words. She had just been diagnosed with breast cancer and was in my office for a preoperative cardiac evaluation. She began to sob softly. Why had good health eluded her even though she did everything right?

When her sobbing subsided, I gently asked her to tell me about her motivation to take such good care of herself. Frustration replaced the sadness in her voice as she described her parents' lifestyles—they both had been obese and had regularly binged on food, cigarettes, and alcohol before succumbing to heart disease in their sixties. She voiced her disappointment that her siblings had blindly followed the "doomed" path paved by their parents. I asked her if she felt that her siblings' choices made them more deserving of cancer. She began to cry again. "I can't believe I would want that for them, but I feel that they deserve it more than I do," she said quietly. I commended her for her honesty. Few of us would ever admit to having such thoughts! I asked her, "Who judges what each of us deserves?"

She remained quiet for several long moments before admitting that she didn't know. "If I do everything right, shouldn't it mean that I get to remain disease-free?" she asked.

"Well, you're sitting here with the diagnosis. What is the reality of the situation, whether or not it should have happened?" I asked.

She thought about it for a while and said, "The reality is that I'm here now."

"That's it. What should or should not happen and what should have or should not have happened are mere speculations. What if you never had the ability to think what should be?" I asked.

She sat quietly for a long time. "Then I'd still be sitting here, but without all this pain," she said with a smile.

Kim had touched upon the root cause of suffering, which is always separate from disease. After I'd examined her, I asked her to investigate her intentions for lifestyle changes and consider whether it came from a place of love for herself or fear of disease.

The Bliss Rx

How does it matter what the intention for wellness is and where it comes from? This is what we will explore in this book, which is not about curing heart disease. It is not even about preventing it with certainty. It is about healing the heart that beats tirelessly in the chest by revealing the heart that is the seat of our true nature.

Consider this question: Who are you? If you are like most of humanity, you might say you are so-and-so, with a particular name, ethnicity, culture, religion, political belief, and other stories that make up your life. You might define yourself by where and when you were born, the state of your body and mind, and your aspirations for the future. In other words, your identity is one of a body-mind occupying a particular time and space in the grand scheme of the universe.

How would your life be if you discovered that who you really are is eternal, unborn, and undying, and bliss is your essential nature? You might be tempted to throw this book away if this is not your current experience, but I implore you to read on. It is quite natural for us to believe that we are limited beings because that is the default model in which the world operates.

Starting at an early age, we are taught by well-meaning caregivers that we are fundamentally incomplete and limited, and that we must seek completion by "making something" of ourselves and "getting somewhere" in our lives. Our lives are marked by an endless seeking to overcome the overpowering sense of lack that arises from believing ourselves to be limited and flawed. We seek

happiness from the outside in the form of wealth, fame, achievement, success, love, security, and relationships.

As we will see in this book, suffering is the result of taking ourselves to be the body-mind. As long as this identity remains, we will suffer because we will always seek completion from external objects. No matter how much we seek and for how long, lasting happiness evades us. We will never have only joy, success, health, and the other things that are desirable. We come to see that life is a zero-sum game—we get what we want some of the time and what we don't want at other times. Our life is marked by chasing what we want and avoiding what we don't want. Since the outcome of anything we do is never in our hands, we live with an underlying sense of uncertainty, dissatisfaction, and yearning, and we never experience lasting contentment.

In contrast to the default model, the bliss model is based on the principle that who we are is much more than the body-mind. Our true nature is pure bliss consciousness: we are unborn and undying, and the body-mind is a mere reflection of our eternal nature. When we realize this, we develop a deep reverence and gratitude for the gift of embodiment, and suffering drops away. There is nothing we can seek outside of ourselves because we see that we are already whole. When bliss permeates our senses, minds, bodies, thoughts, and emotions, our relationship with ourselves, disease, others, and the world changes to one of absolute beauty and joy. Merely believing that we are bliss is not enough; we have to know it experientially. Only then can its transformative power heal us. For this knowing to occur, the various layers of misconceptions about who we think we are must be peeled away. This is the goal of the Bliss Rx.

The Origins of the Bliss Rx

The principles and practices described in this book represent a fundamental shift in our understanding of who we are; they are about healing and are not necessarily a cure. With a shift in the model through which we operate, we can heal completely without being cured of disease. This approach is far removed from the principles of modern medicine, where we become fixated on getting rid of disease at all costs. I am often asked how all this came about. How is it that a cardiologist trained in Western medicine is called to prescribe bliss?

Many parts of this story may seem familiar to you. I had been studying Yoga for several years when I was attracted to a career in medicine. The busy coursework of medical school drew me in, and Yoga moved to the back burner. Competitive and ambitious, I progressed through medical school, internal medicine residency, and cardiology fellowship, getting married and having a family amidst the rigors of training. Midway through residency I became aware of a nagging sense of dissatisfaction that poked its head up quite often; there was always something more to achieve. I wondered why no achievement or success brought lasting peace. However, this ennui seemed to be normal; everyone I knew was also seeking something more.

This inner conflict reached a fever pitch at the start of my training in cardiology. I had just given birth to my second child and couldn't be happier—yet even the beauty and purity of motherhood hadn't permanently erased the sense of inner dissatisfaction. Now I worried about balancing my work with my family and how to progress in my career without losing touch with my children. At each stage of life a new ambition had replaced the old one, and the seeking continued.

One Saturday morning I was unloading the dishwasher when my eyes rested briefly on the block of kitchen knives. I wondered casually if death could end this inner conflict. The thought arose from curiosity; I wasn't depressed or suicidal. Quite suddenly the thought gave way to a vivid vision. I saw myself as a deeply unfulfilled old woman exhausted from the endless cascade of seeking; the permanent contentment that I sought had eluded me despite a successful career and family life. The feeling wasn't one of greed or of wanting more but that of utter despair that I had missed the most important lesson in life.

As the vision faded and my awareness returned to the kitchen, I noticed that several minutes had passed and my hand was frozen in midair, still clutching a utensil. I sat down, shaking. Finally, I knew that what I was really seeking was the end of seeking. No amount of gathering, achieving, or acquiring anything from the external world would solve this puzzle. The quest for the key to this puzzle took me on the inner journey that would lead to a paradigm shift.

Finishing up my cardiology training, I began my clinical practice, waking up well before dawn and spending hours in meditation and self-inquiry before my children rose and the day began. After I put them to bed at

night, I read voraciously and meditated again. Guided by many teachers along the way, I learned to question all that I had taken to be true—my beliefs, thoughts, emotions, actions, and life itself. My life began to change gradually, and this transformation exuded outward in an expanding circle to include family, friends, and patients. This journey had opened the doors to vast possibilities and realms I had never imagined. The model through which I operated began to shift.

Patients were no longer body-minds that needed "fixing" but were vibrant expressions of bliss that were inseparable from me. How could I keep talking about their disease as if they were their disease? How could I prescribe medicines, procedures, or surgeries and send them on their way without trying to have them see their own inherent perfection? How could I possibly have them believe that fixing their disease was the way to end their suffering or that incurable disease meant endless suffering? I was ridden with conflict between my own self-discovery and the way I was practicing medicine. It felt incomplete and phony to not address the elements that contributed to both disease and healing—the mental, psychological, social, emotional, and economic issues that make up our identities and stories. It was not enough to ask people to eat right, start exercising, and stop smoking without also asking them to examine the stress and tensions of reacting and responding to life in fixed, conditioned ways. And yet, I had no reference for how to address these issues from my training in modern medicine. I turned to Ayurveda, Yoga, and Vedanta for answers.

Ayurveda

Ayurveda, literally translated as "knowledge of life," is one of the oldest medical systems, having originated nearly 5,000 years ago. It is a comprehensive science with a philosophy that everything in creation is interconnected; therefore, the health of our body is deeply related to our mind, senses, spirit, and the world we live in. As I began to study Ayurveda, a series of light bulbs began to switch on in my understanding of life, health, and disease. The many gaps of modern medicine that were evident in my training were gradually filled up.

I continue to study the science with various teachers across the globe. My own practice of Yoga has been deeply enriched by incorporating Ayurvedic principles; this came as no surprise since Yoga and Ayurveda are sister sciences.

Yoga

The word Yoga is derived from the root *yuj* ("to join") and can refer to the joining of many things: breath with body, breath with awareness, individual with God, skillful action, dispassion and nonattachment to one's lower self (the limited body-mind), unity with the higher self (eternal bliss consciousness), and so on. Mostly, however, Yoga is defined as the discovery of our true nature of bliss, which occurs when all our mental modifications come to rest.

In Yoga we are asked to cultivate positive aspects of our bodies and minds by discriminating between what serves us and what doesn't. By constantly redirecting our focus and attention, we stop trying to find happiness in external objects. With this, our mental modifications and discursive mind activity come to a rest and we realize that who we are is eternal bliss consciousness. With this shift in identity and perspective, health and disease take on a very different meaning. We find that many of our ailments seem to disappear, and those that don't no longer bind us in suffering.

The eightfold path of Yoga consists of the following limbs: moral or ethical injunctions (nonviolence, truth, non-stealing, celibacy, and non-clinging), virtues (purity, contentment, perseverance, self-reflection, and devotion), body postures, regulation of breath (known as pranayama), withdrawal of senses, one-pointed contemplation, meditation, and absorption into the object of meditation. Self-inquiry is an additional practice that comes from Vedanta.

Vedanta

Vedanta is a secular science that translates into "end of knowledge." It looks critically into our existence and the source of suffering. The end of knowledge here refers to the end of seeking external objects for our happiness or to feel complete—material objects like wealth or nonmaterial objects like fame, success, love, sense pleasures, or relationships. As I discovered years ago, such seeking never ends because one thing leads to another in an endless loop of desires. Vedanta teaches us to look at our life, our body, and our mind in a

highly logical fashion. By contemplating existential questions, we come to see that what we are cannot be separate from what we know.

Ordinarily, when we talk about knowledge, we are referring to knowledge about something—I go to medical school to learn about health and disease. When I become a doctor, I know about medicine; I don't become it. Yet, when I call myself a doctor, my knowledge about medicine becomes who I think I am. We identify with our knowledge about things—a lawyer knows about law, a botanist knows about plants, a herpetologist knows about snakes. This is known as secular knowledge. Our entire education system is based on secular knowledge, which also forms the basis of our experience.

When we look deeply into the experience of sense objects, we will see that we refer to knowledge about seeing or hearing when we look at an object or hear a sound. When we say "I see," we are really saying that we know that seeing is happening. Without the knowing or the awareness of seeing, we wouldn't be able to see. When we say "I see a bird," we are referring to the knowledge about the bird gained through seeing. Throughout our waking hours, we accumulate knowledge about the world through our senses or about our inner landscape by being aware of thoughts and emotions. Secular knowledge becomes the basis of our experience and identity. For example, if a stressful situation comes along, I become identified with it as "I am stressed," when in fact it is only an experience. Vedanta teaches us to examine knowledge critically: if knowledge of my experience is not who I am, then who am I?

This inquiry leads us to Self-knowledge, or knowledge about our true nature. The capital "S" differentiates it from the self with the small "s" that we think we are—the body-mind. The body and the mind, along with the countless experiences that become our identity, are objects, while the Self is the sole subject. Objects are temporary, while the subject is permanent, unchanging, ever-blissful. Knowledge of our true blissful nature puts an end to becoming identified with objects of experience.

Practicing the Bliss Rx

As my self-discovery progressed, I began teaching select patients to meditate during their clinic visits. Initially, they were mainly patients with heavy symptom loads of palpitations, chest pain, shortness of breath, and other

complaints. Among the patients that kept up the practice, the results were astounding: they would return with significantly decreased symptoms. Some patients were no longer interested in meditation for reducing symptoms but for the other benefits it provided, such as peace, a sense of calm amidst activity, better sleep and mood, and a changing outlook toward life. They began to request classes they could attend and recommend to their loved ones, which led to the Heal Your Heart Free Your Soul program.

For six months, from October to March, we met at the department auditorium where I taught various practices, beginning with meditation and progressing to additional practices such as breathing techniques and self-inquiry. The program ended with a weekend retreat of intense practices. At the end of the first sixmonth session, there was a waiting list of people who had heard about the program. When we examined the benefits of the program, we found a significant improvement among participants in measures of perceived stress and mental and emotional components of health over the six-month period.¹

Although the program initially included people with heart disease, it began to attract those with other chronic ailments such as cancer. Soon, people with no disease or issues started enrolling in the program to discover a holistic way to be happy, healthy, and fulfilled.

Can Self-Discovery Be Measured?

Progress on the path of self-discovery is mostly subjective. Although there are sophisticated ways of measuring brain activity to infer one's mental state, the resting of the mind to reveal our true nature is largely unquantifiable. How we respond to life and to our own minds changes and becomes filled with sweetness, softness, and acceptance—parameters that are difficult to measure objectively. Physiological responses such as heart rate, blood pressure, and hormone and biomarker levels or healthcare outcomes such as the need for medications and procedures, hospital admissions, symptom relief, quality of life, and changes in lifestyle may or may not correlate with nonmeasurable parameters such as perception and outlook on life.

This is a significant challenge in body-mind research since subjective improvements surpass objective measurements that the scientific community thrives on. Many studies have demonstrated the beneficial effects of Yoga,

meditation, mindfulness, and other body-mind approaches on heart disease and other chronic illnesses. In this book there will be little emphasis on objective measures. Instead, the approach here is on the subtle aspects of this path on our relationship with ourselves (including our health and illnesses) and with the world.

Building Blocks of the Bliss Rx

The program outlined in this book is based on the following principles:

Model: This program is not aimed toward curing or preventing heart disease; rather, its goal is to optimize the working of the body-mind so that the bliss of our true nature can be revealed. In the process of optimization disease and stress may be reversed, but this is not the end goal.

Science: Many scientific disciplines are interwoven in this book, including neuroscience, physiology, psychology, and quantum physics. Whenever available, modern theories are presented side by side with those of Ayurveda, Yoga, and Vedanta to understand the similarities and differences between them.

Holistic: Every aspect of the program fits into all the other aspects, like a jigsaw puzzle. All the practices complement each other; the whole is greater than the sum of its parts.

Logic: Practices of the program are based on sound logic and are therefore secular and not based in any faith or religion. People who have followed this program have found it to be complementary to their religious beliefs.

Timeless: The strength of a comprehensive program like this one is that you never lose what you gain. Even if you pick it up years after dropping it, you will make progress.

Pace: This program is meant to be self-paced. There is no set time limit for each step, and you can take as long as you need.

Simplicity: The program is simple; however, simple doesn't mean easy. It will ask you to change your fundamental thinking about yourself, others, and the world. It is not meant to be a bandage or cover-up of deeper

issues but a radical shift in your perspective that will lead you from suffering to bliss.

How to Use This Book

This book is laid out in two parts. Part 1 begins with the fundamental difference between the default and the bliss models. Here we will examine the scientific literature and evidence for the program, the logic behind it, and why such an approach is meaningful. We will examine the differences between the two models when it comes to heart disease and its risk factors and the heart-mind connection. We will understand the true meaning of a holistic approach, which neither negates modern medicine nor elevates ancient wisdom but integrates both. Part 2 consists of the Bliss Rx, with distinct steps for realizing bliss as our true nature.

There is no single way to read and implement the recommendations laid out in this book. Here are some suggestions:

- You can read from beginning to end, as with any other book.
 Feel free to include the exercises or skip them initially. Once you've read through, return to Part 2 and do the exercises as recommended.
- If Part 1 is too onerous or dense, skip it and go directly to Part 2. Alternatively, read the chapter summaries of Part 1 and move on to Part 2. If you are curious about the science behind the particular aspects of the program, then you can read the relevant sections or chapters in Part 1.
- I recommend keeping a journal to record your inner and outer progress. Write down your experiences, insights, and discoveries as you progress through the program.

Disclaimer

While on this program, it is important to continue with the medicines prescribed by your doctor. You may find that your need for medicines may decline. At every visit with your doctor, ask about your medicines, what they are for, and how your need for them can be evaluated (through blood tests, drug

holidays, and so on). This approach is not meant to conflict with your current regimen; it is meant to be complementary.

This is not a book on Ayurvedic medicine or self-healing. We will not go into body typing and laying out specific guidelines based on quizzes (though in the resources section I've listed some excellent books that are based on Ayurvedic body typing). Instead, it uses the guiding principles of Ayurveda, Yoga, and Vedanta to address the root cause of suffering. The approach taken here regarding health and wellness is that a healthy body-mind makes it easier for us to let go of the mental modifications that obscure our true blissful nature. The whole purpose of the program is to enable this great self-discovery, not for mere healing of the body-mind. Along the way, such healing can (and often does) occur, but that is only a side benefit and not the end point.

Exercise: Clarifying Intention

As we discovered in Kim's story, our intention for change forms the basis for our actions and what comes of our actions. The outcome of our actions always reflects our intention, which can often be unclear or hidden. To make progress in any field, we must know what we want before we go about taking action. For example, in smoking cessation programs, setting a quit date is the most important first step. If I set the intention but don't really want to quit smoking, the program will not work for me.

Similarly, if you don't really want to discover the unlimited bliss of who you are, you will not feel like keeping up with the program when your mind stories and life situations pull you back into suffering. The drama of the body-mind will seem far more alluring.

- Before you begin practicing the techniques in Part 2, take time to think about what you really want. Write down your answer on a small piece of paper, keeping it limited to one sentence.
- Once you are satisfied with your answer, fold the paper and keep it in your wallet. It can be as simple as "I want to realize lasting joy and peace that can manifest as health and

- wellness" or "I want my combative relationship with my disease to come to an end" or "I want to understand why I'm not always happy and discover ways to find lasting joy."
- Now that you know what you want, set an intention to realize your desire. Hold it close in your heart and think about it as you go about your day. Take out the note and read it, particularly when you feel unmotivated to follow through.

Setting intentions works wonders in every area of life. I make a ritual out of it in order to infuse it with sincerity and longing. It can be a simple thing like being present for my children on the weekend. Every time I'm distracted, I remember the intention I made that is infused with the love I have for them and the awareness of how fleeting their childhood is. Immediately my attitude, posture, and attention shift into one of being completely immersed in what they are saying or doing. Everything else can wait because now is the time for me to honor my intention to myself, and in this honoring, my children benefit as much as I do.

The beauty of this path is that even if you are half-hearted about it, sticking with it will transform your desire and intention. As you progress through the Bliss Rx, you will gain greater clarity and insight into your deepest desires and longings.

The only other ingredient required for this program is integrity, which is honesty in action. Small steps taken with integrity and commitment are much more effective than ambitious plans that we can't really keep up with. At all times, recall that the path to bliss is your birthright. There is nobody that is more or less deserving of it, for it is the true nature of all in existence. Mostly, enjoy the process!

In the next chapter we will explore the many benefits of the Bliss Rx and the ways in which this program transforms our life, health, and relationship with disease.

Summary

- The principles and practices described in this book represent a fundamental paradigm shift in our understanding of who we are, which determines our relationship with health and disease.
- In the default model we assume that we are the body, the mind, or a combination of the two. This model leads to endless seeking because it is associated with an inherent sense of lack, so we continually seek fulfillment from external objects.
- In the bliss model we start with the knowledge that who we are is eternal bliss consciousness. When we see this, we stop seeking for completion because we realize that we are already blissfully whole. This realization changes our relationship with ourselves, the world, and our disease. Suffering drops away.
- The approach taken in this book is that a healthy body-mind makes it easier for us to realize our true blissful nature. The whole purpose of the program is to enable this great selfdiscovery and not for mere healing of the body-mind.
- Before you begin the program, clarify your desire and set an intention to work with it.

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^{1.} K. M. Chinnaiyan, A. M. DePetris, J. A. Boura, K. Stakich-Alpirez, and S. S. Billecke, "Feasibility of Establishing a Comprehensive Yoga Program and Its Dose-Effect Relationship on Cardiovascular Risk Factors and Wellness Parameters: A Pilot Study," *Int J Yoga Therap* 25 (2015): 135–40.

Part 1

Models of Health and Disease

In this section we will investigate the fundamental differences between the default and the bliss models, including scientific literature and evidence for both. We will delve into the limitations of the default model and study the logic behind the bliss model and how such an approach can be practical, useful, and meaningful. Importantly, we will see that a truly holistic approach negates neither model but harmoniously incorporates both. We will begin with the end in mind by assessing the manifold benefits of such an integrative model.



Healing in the Bliss Rx Program

The Bliss Rx is targeted toward discovering bliss. In this program you will work in an outside-in fashion to clear out everything that obscures bliss; by doing so, you will bring every aspect of your life back into balance.

When bliss begins to permeate our senses, our minds, our hearts, and our actions, health is restored in an inside-out fashion. Does this mean that blockages in arteries and leaky valves will be miraculously cured? Maybe. Maybe not. But what this means is that with the end of suffering, these conditions will not limit us in any way. They will become irrelevant as they are gently accepted into our reality. Once the bliss of our true nature is tasted, nothing else will seem as sweet or as worthy of our attention and devotion. When we begin to live our lives as bliss, we change the structure of the cosmos. Yes, each of us is that significant and that powerful.

Every choice, every thought, and every action that occurs daily takes us one step toward or away from bliss—and, by default, health. Nothing can be excluded in our pursuit of bliss: the way we brush our teeth, greet our spouse, look in the mirror, talk to the waitress, drive our car, prepare our food, eat our meals, exercise our body, nurture our mind, and relate to our children, colleagues, customers, or parents. Everything counts. It is not just what we do but how we do it that makes a world of difference in whether we are moving closer to suffering or to bliss.

Once we tap into it, bliss expands and radiates outward into our body, mind, and world, permeating them with its joyful and peaceful essence. The following are some of the effects of this inside-out process.

Reduced Stress

If you follow the practices of this program, my hope is that you will experience a greater sense of calmness and an ability to deal with the stressors you face in daily life. The meditation practice alone will have the effect of decreasing the stress response.

Shift in Stimulus for Lifestyle Changes

When it comes to the effectiveness of the program on health and disease, perhaps the most dramatic shift we can see is in why we make lifestyle changes. In the default model, lifestyle changes are made out of fear and resistance—we change how we eat, we start exercising, and we quit unhealthy addictions because we worry about getting a disease or dying before our time. The fear of disease or death hangs constantly like a sword over our heads, the ominous voice commenting on every choice we make.

In the bliss model, lifestyle changes occur out of a deep honoring of our bodies and minds. The wonder of being alive arises not only as a joyful respect for the body's miraculous processes but also aligns us with all of life. We intuitively reach for foods, exercise, and entertainment that honors this inherent joy. While our progress in the program occurred in an outside-in fashion, it now proceeds in an inside-out fashion, our choices radiating from the wellspring of inner bliss.

Loss of Victimization

When we delve into self-inquiry practices, we realize that the stories we have been telling ourselves have no inherent truth. When we cultivate the ability to stand apart from our stories, we see that believing these stories placed us in the role of victim. When we take responsibility for our own mental processes and actions, we stop reacting and start responding. With this responsibility, we stop being victims and grow into self-mastery.

We realize that no other person, history, situation, or circumstance is responsible for the way we think, act, and feel. When we take back the power for our thoughts, feelings, and actions, we learn to stand in the light of our own bliss. We lose the ability to ask "Why me?" or "What did I do to deserve this?"

Discovery of Forgiveness

When we stop being victims of our circumstances, situations, or others, we become radically forgiving. The concept of forgiveness shifts and we realize that in the spaciousness of the here and now, neither the past nor the future exist as reality. We see that our grudges and hang-ups take away power from ourselves and place it upon our situations and others. We see that we don't forgive for others' sake. It is a natural outcome of loss of suffering. Moreover, when we reclaim our power, we see that

forgiveness is not something we do. It is what happens when we stop being victims of our pasts, situations, and others.

Discovery of Compassion

Compassion is the natural consequence of loss of victimization and discovery of forgiveness. Note that compassion is different from pity, which has the connotation of superiority. We pity someone that we think is beneath us.

Compassion, on the other hand, is rooted in love and equality. When I see that I'm as much of a slave to my conditioning as everyone else, I stop judging them. I see that the only reason I'm bothered about something in you is that I have the same trait. Empathy replaces judgment and wholeness replaces separateness. My understanding of your predicament is not based in thoughts about how things should be for you, which would be arrogant. How can I possibly know what should or should not be? Instead, I open fully to your pain and allow it to be. You and I become one in the spaciousness of being. Your pain is honored in this openness and availability. All possibilities are held in love.

Discovery of Gratitude

When the grip of conditioning is loosened, we lose the ordinary way of living in the head and move into the spaciousness of the body. In this spaciousness we begin to engage with the world in a novel way. Sense perceptions, physical sensations, thoughts, and emotions become vibrant and alive. With the shift of our mental processes we tend to live in the moment. With this transition to openness we discover an inherent sweetness in all of life. Wishing for something other than what is stops making sense. Wanting a specific outcome also stops making sense. The wonder of being takes over even though life goes on as before, and there is immense gratitude for it. The flavor of our prayer changes from one of needing and wanting to one of overwhelming gratitude for the gift of life.

Growing Acceptance

When we discover the vast, empty spaciousness within, our relationship with life, health, and disease takes a dramatic turn. Nothing is the enemy. If you have a chronic illness, you will start to notice a deep gratitude towards it. It becomes the doorway for self-discovery and you put your weapons down. Your attitude toward treatment will change; of course you will pursue the best therapies for your condition, take your medications, and follow your doctor's orders, but the why of it shifts.

While in the past treatment was based on fear and rejection ("I don't want to have it," "I don't want to die," "I want my old life back," and so on), it is now based in growing

acceptance. Thoughts and concepts about disease no longer make sense when you become adept at allowing sensations to arise and subside. You see that all fearful thoughts about wanting or not wanting and should or should not are arisings in the now. They have no inherent truth, and you can no longer take them seriously. This is true surrender.

Note: Many who have experienced a spontaneous cure or a remission attribute it to this deep acceptance. However, the paradox is this: it doesn't happen as long as your intention for acceptance is a cure or a remission. Only when you let go of wanting and totally allow everything to be as it is can the body heal to such a large extent.

The effects of the Bliss Rx described above will become a reality for you once you start applying the practices and principles that are presented in Part 2. We will now examine the scientific basis for the default and bliss models. If you can't wait to get started, you can skip over to Part 2 and return to the related sections as you read and practice.

- The Bliss Rx is targeted toward discovering bliss. In this program
 you will work in an outside-in fashion to bring every aspect of your
 life back into balance.
- Balance enables us to recognize our innate blissful perfection. When bliss begins to permeate our senses, our minds, our hearts, and our actions, health is restored and radiates outward in an inside-out fashion.
- Stress reduction is the most obvious first effect of the Bliss Rx.
- In the bliss model, lifestyle changes occur out of a deep honoring of our bodies and minds.
- When we take responsibility for our own mental processes and actions, we stop reacting and start responding, thereby growing into self-mastery and losing the victim mentality.
- When we reclaim our power and stop being victims, forgiveness arises naturally.
- Compassion is the natural consequence of loss of victimization and discovery of forgiveness.
- When we open to life in sweetness, we learn the meaning of acceptance. The wonder of being alive takes over and immense gratitude begins to arise.
- Naturally, our relationship with life, health, and disease takes a
 dramatic turn. If you have a chronic illness, you will start to notice a
 deep gratitude towards it. It becomes the doorway for selfdiscovery.

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The Default and the Bliss Models

Cindy was fifty-two when she first came to see me for her symptoms. Superbly articulate, intelligent, and curious, she eloquently described her condition. She had been having a constellation of symptoms for about two years and had undergone a battery of tests that didn't show any problems with her heart. Because she had a strong family history of heart disease, she was concerned even though the tests were negative.

When we talked about her life, she said that although she had a postgraduate degree, she had chosen to stay home to care for her children. Her voice was tinged with warmth and pride as she told me how well they were doing as young adults. She had gone back to work two years ago, plunging into the rat race. Her work was extremely stressful and she often stayed up late to finish projects. She had no time to cook, exercise, or relax, even on weekends. Her work consumed her. She had developed sciatica and arthritis, which made it difficult to exercise even when she had the time. She frequently suffered severe heartburn, palpitations, and chest pain. Her blood pressure and cholesterol were very high, and she admitted that she hated taking medications.

When she finished talking, we sat in silence for a few moments. I asked her to take a minute to tell me why she was working. She thought about it for a while and answered that she didn't need the money. She was doing it to feel the satisfaction of accomplishment. She said that she had been reading about her health problems and was "trying" to make changes but couldn't do what needed to be done. She was stunned when I told her that her body simply doesn't care how she felt about her work, her sense of accomplishment, or how hard she was trying.

Your Body Doesn't Care

As you will see in the following chapters, your body merely responds to the hormonal and chemical onslaughts brought on by particular pathways in the brain. Your arteries, organs, and cells simply don't have the ability to concern themselves with how hard you are trying to change your diet, develop an exercise habit, or cope with your life. They merely respond to what you do and how you think and feel. Your organs only see the end product of your effort and have no ability to appreciate the process. They don't care that you work hard to support your family, that you need success to feel good about yourself, or how much you hate your disease. How you feel about the world, politics, religion, other people, or yourself makes no difference to your body. Your financial and relationship issues, experiences of your past, and dreams for your future don't concern it either.

Your body takes in the energy it needs and expends just enough of it to keep the cells working. Your habits and addictions have a direct effect on your body through the brain and the hormonal system. If you're at war with the world or with yourself, your body notices and produces the hormones and chemicals that prepare you for fighting. If you're at peace, it reflects accordingly. It's not personal; it's biological.

As we spoke, I noticed a change in Cindy's posture. Her face lit up with recognition, and she exclaimed that she got it. She understood that her body was simply responding to her stressful lifestyle and resolved to change her situation immediately. She was receptive to the many changes I suggested in her lifestyle, most of which are presented in this book. Over the next year I saw a considerable change in her attitude. She quit her job for a more relaxed consulting gig. She made time to rewire her brain, and her body responded accordingly. Her blood pressure came down and her heartburn went away. As her hormones began to return to a more wholesome balance, her cholesterol started decreasing without medications.

Why would Cindy's symptoms improve with a change in her attitude and, consequently, her lifestyle? After all, she was living the life that most of us can only dream of: a fulfilling (albeit stressful) job, successful parenting and marriage, and generally what we would consider a well-lived life. Isn't this what each of us strives for? Isn't this what we value? We appreciate success at any cost, even though the definition of success is fluid and subjective. Cindy's many symptoms related to her lifestyle form the basis of the model on which modern society operates. At the crux of this model lies the issue of identification.

The Default Model

In modern medicine the body forms the model for our identity. We assume that the body is who we really are. It is the basis for every aspect of our lives—from the way we live to what we seek to be happy to how we interact with others, form habits and lifestyle choices, and think about disease and death. In recent decades research on the effect of emotions and the mind on health has opened us to broadening our model a bit further—we may not think we are exclusively the body, but we feel that we are the body and the mind. When we operate from this assumption, we understand that the body isn't the entity that feels, makes decisions and choices, relates in relationships, or responds to the environment; rather, it is the mind, which is a large, amorphous mishmash of thoughts and emotions. When the mind goes to the extremes of anxiety, depression, hallucinations, or psychosis, we tend to call it abnormal. Otherwise, we assume that the way we think, feel, and respond is normal because we see that everybody around us is behaving in the same way.

When we take ourselves to be our stories, we strive to avoid suffering at all costs, which may lead us to doggedly pursue diet, exercise, and lifestyle interventions in fanatical ways. The explosion of "cure-all therapies" in the current landscape of healthcare is proof of the default model—doctors and healthcare practitioners in all fields have seemingly come up with the ultimate diet, supplement, or lifestyle that is supposed to cure everything from heart disease to cancer. It isn't uncommon for me to see patients who jump from one such "cure" to another (and spend considerable amounts of money and resources in the effort) for years before concluding that none of these cures live up to their claims. They are looking to end suffering, yes, but they are looking in the wrong place.

Likes and Dislikes: The Fuel for Identity

When we identify ourselves as the body-mind, we are naturally driven to pursue what we like or what we think is good and avoid what we dislike or what we think is bad. We live our lives seeking pleasure and fulfillment in material and mental objects. Material objects are those that we can buy with money, whereas mental objects are those that we seek to feel complete: fame, notoriety, success, love, relationships, athletic achievements, and so on. Powered by certain brain and hormonal pathways, this endless seeking pervades all spheres of life, and we attribute our happiness or unhappiness to what we get or don't get.

We try to hold on to the good things, but they never last—the newer car model becomes more attractive than the one we have, fame comes and goes, spouses die, and children grow up. Even if the good things do last, they don't seem to give us the same extent of joy that they initially did. After thirty years in the same job, we feel

uninspired and long for more. After a while, the big house we saved up for feels burdensome with all the maintenance. We go on diets, pursue extensive exercise programs, and invest in anti-aging products, finding that the body ages despite our best efforts.

When we don't have the things we want, we crave them. When we get what we want, we fear losing them. Our default "pull and push" mode of operation determines the way we relate to ourselves and others. Constant evaluation, judgment, and comparison form the basis of relationships—we like some people and dislike others. This attitude would be fine if we always get what we want and never what we don't want, but because life doesn't work that way, we have a constant underlying sense of being powerless. Our likes and dislikes become the labels that form our identity; they become who we are.

Having an incurable ailment like heart disease in this situation is devastating. Since we don't like having chronic diseases, our dislike of disease becomes our source of suffering. We want to do away with the disease because it threatens our identity. Prevention and treatment in this default model are thus based on the assumption that having what we want determines our happiness or suffering. Disease becomes the enemy that needs to be destroyed, as we see with the widespread "fights against" cancer, heart, or Alzheimer's disease.

Are Disease and Suffering Interchangeable?

The default model is also the basis for training in modern medicine. We are taught to focus entirely on the disease and very little on the person. The fundamental belief of operating in this model is that suffering is caused by disease. Everything we do to alleviate suffering stems from striving to make the disease go away. However, here is a sobering fact: very few diseases that afflict wealthy and developed nations are curable. Most of the illnesses we see in western medical practice are never cured—at most, they are "managed."

For example, congestive heart failure is the number-one cause for hospital admissions and readmissions in the US.² There is no cure for heart failure. The most definitive treatment for heart failure is heart transplantation or the newly approved ventricular-assist devices that take over the pumping function of the heart. The body's immune response never accepts the organ as its own and aggressively rejects it. Heavy-duty drugs that are given to overcome this immune reaction come with risks of common and rare infections, blood clots, and other fatal side effects. Nearly every transplanted heart develops a peculiar type of blockage in the coronary arteries that can cause heart attacks and death. We just replace one problem with another—even though

we replace a diseased heart, suffering never ends even as quality of life is improved and people with transplanted hearts live longer than those who can't get one.

This predicament is not unique to heart failure; it is the case with every chronic illness that has no cure. As a nation, we spend billions of dollars in merely managing chronic incurable illnesses, which then begs the following question: Since the default model rests on the assumption that to end suffering we must make a disease go away, are we doomed to suffer if we can't get rid of disease? Conversely, does suffering go away if a disease is cured? Look at anyone who has been cured of a disease to see if they find lasting happiness. You'll find that they have something else that keeps them from realizing permanent happiness.

My training and practice in India took place among the very impoverished who had little access to healthcare. Infectious diseases like cholera, typhoid, and malaria predominated the hospital wards I worked in; there was much suffering among patients and their loved ones. The constant threat of death loomed large in communities subjected to not-too-rare outbreaks of water- and food-borne illnesses. It made sense, then, that disease would indeed cause suffering, and ending them should bring permanent happiness. However, this was not the case. Once cured of their disease, they continued to suffer because their attention shifted to other things they wanted and didn't have.

When I moved to America, it took me a while to become accustomed to practicing medicine differently. There has been no threat of imminent death from malaria or typhoid in the hospitals where I've worked. For the most part, doctors here deal with preventing chronic illnesses or their effects on quality of life. And yet there is no dearth of suffering even in this wealthy and privileged society. I learned that imagined outcomes of disease are as threatening to one's well-being as actual ones. For instance, anxiety about not recovering and fear of dying leads to worse outcomes in people who have had a heart attack.^{3, 4} If we aren't battling disease, we are battling the world, others, and our own minds to find fulfillment.

Over the years of talking with hundreds of patients, I have come to see that suffering has nothing to do with disease and everything to do with the default model of taking our bodies to be who we are. As long as disease is the enemy, it is bound to cause suffering, no matter where we live and what our societal status is, and being cured of disease doesn't necessarily alleviate suffering as long as we operate from the default model.

The Bliss Model

Consider a statement like this, which is common in hospital charts: "John had been in good health until recently, when he was diagnosed with lung cancer." Our definition of John's health is that he didn't have cancer or any other known illness until recently. Notice that the definition doesn't say anything about his mind, emotions, or life. He could have had chronic stress and his life might have been in shambles, but the statement about his health doesn't really take into account anything but the absence of disease. This is in direct contradiction to the definition of health by the World Health Organization, which states that health is "a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity."

Ayurveda takes it one step further, stating that health is a state of perfect balance in which all bodily functions are normal, including digestion, tissue metabolism, and excretion. In health the mind, senses, and the self are filled with bliss.

The word *bliss* never came up in my medical training. In the default model we don't aim for bliss, particularly when there are no objective measures for it. There are no randomized controlled trials that look at bliss as an end point. Instead, we focus on measurable end points such as procedures, deaths, heart attacks, or drug side effects. Notice that all these end points are squarely based on the default model that says we are the body-minds subject to disease and death.

Assumptions About the Brain

The default model is based on the assumption that the brain creates consciousness. However, we will see in the following chapters that the brain can only create electrical and hormonal pathways based on how we view life. It doesn't create consciousness that then powers the rest of the body-mind, since it is itself a part of the body.

Like the rest of the body-mind, the brain is subject to the same intelligence that powers our cells, organs, and tissues, which "know" exactly what they need to do—and don't need our direction or supervision, thank goodness! Imagine trying to make sure that your digestive system is breaking down that pizza, beer, and cake you had last night while orchestrating your heartbeat, immune system, and the countless chemical reactions that occur on a moment-to-moment basis. No matter how skilled you are as a supervisor, you'd fail instantly and quite miserably. In addition to running your body without your help, this intelligence also powers your mind and the stories that make up who you think you are—and it doesn't stop there.

This same intelligence runs nature's cycles, pushing evolution along in ways that are not always predictable. Even though it is invisible, we feel its power in every sunset, the first blooms of spring, or the sight of a lioness protecting her cubs. This intelligence powers gravity, magnetism, and other physical laws as much as it does our circulation,

digestion, and homeostasis, as well as our changing thoughts and moods. Nature never feels incomplete and merely submits to this intelligence.

We, on the other hand, feel incomplete because we don't realize that we are already whole and perfect. Knowledge of our true nature sets us free from suffering and fills us with bliss because we realize that not only are we whole, but also that nothing in creation is separate from us. Even though the wisdom of oneness is ancient, modern quantum physics experiments are beginning to demonstrate that everything in creation is reflected in everything else.

In 1982 Alain Aspect, a physicist, questioned the previously held belief that nothing travels faster than light.⁵ In a groundbreaking experiment, Aspect and his team discovered that subatomic particles like electrons seem to communicate with each other instantly across thousands of miles. These particles seem to have an uncanny knowledge of what the other is doing and mirror each other simultaneously. Aspect went on to describe quantum entanglement, where pairs or groups of particles interact in such a way that the state of each particle cannot be described independently; instead, the system must be described as a whole.

The Illusion of Separation

If you've heard of the famous double-slit experiment, you are probably familiar with the observer effect, which states that merely observing a phenomenon changes it. In this experiment, a series of electrons or photons (light particles) are fired at a plate with two narrow side-by-side slits. On the other side of the plate, a photographic plate is set up to record the behavior of the particles. It turns out that a particle will ordinarily act like a wave by passing through both slits simultaneously and produce a wave pattern on the photographic plate. However, if we observed the particle, it passes through only one slit to produce a different pattern.

Many questions come up when we think about this experiment. Does the unobserved particle split up or does it turn into a wave as it approaches the slits? How does it know that a pair of slits is coming? And how does it change its behavior when it is being observed? Are the observer and the observed one, with no separation in the first place?

The Hawthorne effect is a similar phenomenon, where the behavior of individuals being observed changes when they are aware that they are being watched. Consider, then, that all the thousands of patients in clinical trials who know that they are being watched change their behavior; how objective are the results of these trials?

The problem with measuring phenomena (or results in clinical trials) is that we don't take into account that we, the observers, are also part of the phenomena that we are trying to observe.

Scientists now tell us that electrons and other particles remain in tune with each other across great distances, not by mystic communication but because their separateness is an illusion. Every cell of our bodies is perfectly synchronized to every other cell, each a blueprint of the whole. Everything in creation is, in fact, an extension of one greater principle. Thus, the tiny little subatomic particles in our neurons are intimately connected with every creature in the universe. Everything is a part of everything else.

Changing the Model

Almost on a daily basis, patients, friends, and family members ask me for my opinion about the latest fad diet, supplement, or exercise program that claims to be the next magic bullet that will solve all health problems. We as a society have found many things on which to blame our problems: carbohydrates, grains, fats, proteins, the government (or the "establishment," as one of my patients is fond of saying), the environment, the ozone layer, the tobacco companies, and so on. Rarely do we step up to take complete responsibility for the way we think, act, live, and care for our bodies.

When we begin to see that everything is a part of everything else, we stop believing in magic bullets. If you are chronically stressed about your job, angry about the government, and struggling in your relationships, heaping servings of coconut oil or yoga classes five times a week will be of little use. Your health and well-being will continue to suffer until you realize your part in your misery. When we see the intricate way in which all of nature is bound together, we stop blaming everything else for our challenges. We own our minds, actions, emotions, and thoughts.

When we own our minds, we set ourselves free. The lesser our dependence on external factors for our happiness and well-being, the greater will be the knowledge we gain about the interconnectedness of life. This is the great paradox. Our knowledge of the world around us is colored by how we see ourselves. As long as we take ourselves to be limited body-minds subject to the winds of change, the world will appear threatening or as something we need to exploit. When we see ourselves for who we really are, we see that the world is an extension of ourself and that it is filled with incredible joy and beauty. This unity or wholeness is the basis for the bliss model. Although modern science is gradually discovering the workings of the universe, bodies, brains, and minds, they were eloquently described thousands of years ago in a holistic model.

The Holistic Way

One popular mode of thinking with respect to preventing heart disease is to medicate everyone. Thought leaders puzzle over the fact that despite advances in treatment, we

have made no dent in the prevalence of heart disease. Some have suggested "statinizing" drinking water (adding statins, the cholesterol-lowering medicines, to the water supply) or prescribing a "polypill" with small doses of all beneficial medicines to everyone. Fortunately, these ideas have not come to pass because we are now discovering that statins and other medicines are not entirely benign and have serious and disabling long-term effects.

Despite all the advances in technology, pharmaceuticals, and procedural/surgical skills, we have not made any significant strides in preventing heart disease. This is where modern medicine has failed terribly. This failure is the result of not understanding the connection between disease and the mind. If we are not motivated to change our lifestyle, we cannot prevent heart disease or the other chronic illnesses that make up the overwhelming costs in healthcare. Our lifestyle, in turn, is dependent on how we think and feel about ourselves, the world around us, and about health and disease. A holistic approach is direly needed to make strides in prevention.

Holistic care does not imply switching from synthetically produced pharmaceutical agents to herbal preparations or eschewing life-saving modern therapies. Holistic refers to *holism*, defined as "a theory that the universe and especially living nature is correctly seen in terms of interacting wholes that are more than the mere sum of elementary particles." This approach to healing is to consider the whole person—the mind, the body, and everything that makes up that person.

This model excludes nothing—our jobs, our daily habits, what we eat, how we eliminate, how we think, how we process emotions, how we relate to others and the environment, what we take in through our senses, and how we see ourselves and the world around us. Disease is the result of a misapprehension in any of these aspects of our lives and arises from the default model, which separates the mind from the body and both from life.

Holism takes on a radically different meaning when we consider that the basis for all human suffering is also the foundation for health and disease. This consideration requires a change in our operating model, which we will examine over the next few chapters. However, in keeping with the true spirit of holism that doesn't exclude modern therapies, we will first explore the marvelous advances that have revolutionized the treatment of heart disease.

Summary

- Your body has no ability to care about how hard you try to make changes and only responds to how your lifestyle affects the brain and hormonal pathways.
- Prevention and treatment in the default model assume that suffering is the result of disease.
- We are bound to suffer when we operate in the default model, where disease can threaten our identity and survival.
- Health in the bliss model is defined as a state of perfect balance in which all bodily functions are normal and the mind and senses are filled with bliss.
- The bliss model is based on the concept of wholeness, where everything in creation is part of everything else. Experiments in quantum physics seem to agree with this concept.
- Wellness is deeply facilitated through a shift from the default to the bliss model.

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The Magnificent Machine

Mark was sixty-five years old when he was wheeled into the emergency room on a cold winter morning. He had been shoveling snow in his driveway when a dull ache began in his chest, spreading to his back and left arm. Unable to catch his breath, he went in the house and called for his wife, Janice. By the time Janice came running from upstairs, he had collapsed on the kitchen floor. She called 911 and paramedics were at the door in minutes—they shocked Mark's heart to revive him, inserted a breathing tube, and rushed him to the hospital. The electrocardiogram (EKG) they performed in the ambulance showed that Mark was having a heart attack. His heart muscle cells were choking, being deprived of oxygen.

The heart is a pump. Like any other mechanical pump, it needs fuel to do its job. The heart's fuel is oxygen, which is supplied by the three coronary arteries that lie on its surface. If any one of these arteries suddenly becomes blocked, a part of the pump no longer gets oxygen and starts dying. Starved of oxygen, a part of Mark's heart began to die when he was snow shoveling, stimulating the nerves to call out in panic as pain.

The heart needs electricity to function, which is provided by a specialized network of fibers within the heart muscle. When a part of the heart muscle begins to die off, the electrical fibers in that area short-circuit. By the time Mark came inside the house, the system had shorted and his heart had gone into an erratic rhythm and then came to a standstill.

Blood vessels coming to the heart are called veins and those leaving the heart are called arteries. The veins bring back deoxygenated blood to the heart, with carbon dioxide and wastes released by cells throughout the body. This blood is pumped into the lungs—we breathe out the carbon dioxide, and the oxygen we breathe in is taken up

by the blood. This oxygenated blood is brought back to the heart, which pumps it to the rest of the body, including the brain, through the aorta. Brain cells need oxygen even more urgently than heart cells—when Mark's heart stopped, his brain became oxygen-starved and he lost consciousness. Revived by the electrical shock that the paramedics provided, his heart restarted, but the blockage in the coronary artery continued to starve the heart muscle of oxygen.

When the ambulance arrived at the hospital, Mark was immediately rushed off to the heart catheterization laboratory, where doctors opened up the blockage. As he was wheeled into the intensive care unit, the cardiologist spoke with Janice about her husband's condition. Exhausted and scared, she wanted to know what had happened. Her husband had had no signs of having a heart problem. In fact, his family doctor had given him a clean bill of health only a month earlier. The cardiologist sat down with her to explain the underlying process of Mark's condition, which is known as atherosclerosis.

Atherosclerosis

Commonly called "hardening of the arteries," atherosclerosis is the process that results in blockages in arteries resulting in "attacks" such as acute coronary syndrome (heart attack), stroke (brain attack), or peripheral arterial disease (leg attack).

Atherosclerosis is a complex process that begins in childhood and continues undetected for decades. Several factors contribute to the formation of atherosclerotic blockages in the coronary arteries, which arise from the aorta and sit like a crown above the heart (*corona* in Greek translates to "crown"). Blood is ejected from the left ventricle into the aorta at a high velocity. When the heart relaxes, the blood in the aorta flows back into the coronary arteries. This high pressure creates turbulence in the flow of blood, creating tiny tears in the lining of the arteries. Exposure to toxins like cigarette smoke, high blood sugar, and unhealthy diet, as well as psychological stress, lead to an inflammatory response in the damaged lining of the arteries and cause abnormalities in the blood-clotting system (more on this in How Risk Factors Turn into Disease). As a result, specialized blood cells known as macrophages in the blood rush in to deal with the problem.

You may remember from high school biology that there are three types of circulating blood cells: red blood cells (RBCs) that are responsible for transporting oxygen to the cells, white blood cells (WBCs) that fight infection and inflammation, and platelets that play a key role in blood clotting. Macrophages are a specific subgroup of WBCs that drive the formation of atherosclerotic plaques, or hardened areas in the artery walls. Macrophages are like vacuum cleaners, eating up and digesting dying or dead cells,

germs, cancer cells, foreign substances, and anything the body needs to get rid of. They help maintain immunity and fight off illness. With this intent, they enter the walls of the arteries through the damaged lining and start to "eat up" the lipids (fats) that have leaked in. When such cells are viewed under the microscope, they appear like foam or bubbles and are called foam cells. These foam cells accumulate in the area of the plaque.

The plaque is separated from the blood flowing through the artery by a layer of cells that form a cap over it. When the cap is thin, it can be provoked by various triggers such as physical exertion, a big meal, cigarette smoke, sexual intercourse, drugs such as cocaine, emotional trauma, or even the natural rhythm of cortisol and other hormones. Janice reported that Mark did not exercise regularly; shoveling snow on a cold day when we are not used to physical exertion is enough to aggravate a plaque with a thin cap. Provoked by the sudden exertion, the cap over Mark's plaque broke off, exposing its irritating contents to the blood flowing in the artery. Immediately, the platelets in his blood rushed in to form a blood clot over the plaque to try to seal it off. They succeeded—at a cost. The clot blocked the artery entirely, preventing oxygen in the blood from getting to the heart muscle.

Complete filling up of the arterial lumen causes a heart attack that is often fatal. In fact, nearly one-third of individuals having this type of a heart attack never make it to the hospital. Mark had been fortunate that the paramedics arrived within minutes and were able to jumpstart his heart back to life. At this point in the explanation, Janice's concern grew. She began to worry—if Mark had such a serious condition, why did he not have symptoms? What should they have looked out for?

Symptoms of Heart Disease

There is a wide spectrum for symptoms and how people present with heart disease. The most common symptom of heart attacks is chest pain or discomfort, as Mark had. The discomfort can be anywhere above the belly button and feel like a pressure, an ache, or pins and needles, and it can travel from the chest to the jaw, arm, back, or neck. Sometimes the discomfort occurs only in these areas and not in the chest. A common symptom of heart disease is shortness of breath with or without chest discomfort. Women tend to have more atypical symptoms compared to men, with more shortness of breath, fatigue, heart racing, or a general sense of not feeling well.

The combination of a sudden onset of symptoms along with evidence of heart muscle damage on electrocardiogram (EKG) and blood tests is called acute coronary syndrome, a fancy way for saying heart attack. A heart attack produces sudden symptoms, but this is not the only way a plaque announces itself.

Quite often plaques gradually build up in the artery to produce a blockage. When this happens, symptoms come on only with exertion but not while resting. Exertion is any activity that makes the heart require more oxygen to do its work, including physical activity, physical exercise, or emotional stress, all of which make the heart work harder. The blocked artery can't provide enough oxygen to the heart when its workload increases, resulting in symptoms of chest discomfort, known as angina. When this happens over weeks or months, it is called chronic stable angina.

Janice confirmed that Mark had none of these symptoms leading up to the heart attack. This is not uncommon; the very first sign of a heart problem in nearly 40 percent of men and 60 percent of women is what we call sudden cardiac death. Mark was part of this statistic, where his heart stopping within minutes of feeling unwell was his first symptom. This brings up a valid concern. How can we detect heart disease before such a potentially fatal event happens? How had Mark gotten a "pass" on his stress test just a month before his heart attack?

Detection of Coronary Heart Disease

We have many tools at our disposal to detect coronary artery disease. The type of test we would have selected for Mark would depend entirely on whether he was having symptoms or not. If he had complained of chest discomfort, shortness of breath, or other symptoms while exercising, we would have recommended a stress test.

Stress Tests

A stress test is called that because it is meant to bring on symptoms and signs of a blockage. Since gradually built-up blockages bring on symptoms with exercise or exertion, stress tests mimic such conditions. When we exert ourselves, our heart rate and blood pressure go up, along with a constellation of changes in the body, to adapt to the workload.

There are many different types of stress tests, based on the type of stimulus we provide for changes to occur in the body. Most often, doctors prefer the type where you exercise on a treadmill since this gives us information on how your heart and vascular system function as you go about your daily life. If you cannot exercise because of joint or other problems, a stress test using medications that simulate exercise by increasing heart rate or blood flow is recommended. We can take pictures of the heart as part of the stress test, which can give us additional information regarding the location of the blockage.

All stress tests can only pick up severe blockages, usually those that are more than 70 percent. Like Mark, many of us may have less-than-severe blockages that don't show

up on stress tests. The thin fibrous cap of the plaque breaks off during times of unusual (or usual) physical, mental, or emotional stress when the artery becomes suddenly blocked, which causes a heart attack. Stress tests help us infer the severity and location of a blockage. To look directly into the arteries we will need a different test.

Coronary Angiography

The radical revolution in heart disease treatment began in the late 1920s when Werner Forssmann, a surgical resident in a small German town, inserted a catheter into a vein in his arm all the way to the heart, injected dye into it, and took an X-ray to see where the catheter was. He won the Nobel Prize in medicine almost thirty years later, and his work set the stage for others to use catheterization for diagnosis and therapy of heart disease.

Modern cardiology is unthinkable without his contribution, even though the medical community at the time thought that what he did was absolutely insane.

Coronary arteries can be looked at directly with angiography. There are two ways to do this: heart catheterization, or a CT scan. Both techniques look at the coronary arteries directly. Heart catheterization is an invasive procedure where thin, strawlike tubes called catheters are inserted through an artery in the groin, wrist, or arm and into the aorta. Once the catheter reaches the opening of the coronary artery, a dye is injected and the shadow of the dye filling the artery gives us information on blockage presence and severity. Angiography with a CT scan uses the same dye as in heart catheterization. However, the dye is injected into an arm vein through an intravenous (IV) line, and pictures are taken as you lie on a table that passes through a doughnut-like machine.

We choose a catheterization or a CT scan depending on your history. If it sounds like there is a definite probability of your having a severe blockage, then we recommend a catheterization, but if we are not entirely convinced, we prefer a CT scan. A CT scan is a great test to reassure us when you don't have blockages. On the other hand, if there are severe blockages found on the CT scan, you would still need heart catheterization.

Detecting Blockages When You Don't Have Symptoms

As we have seen with Mark, a stress test didn't help, and he didn't qualify for angiography because he had no symptoms. This is one of the biggest problems in modern medicine, where the detection of a serious disease when symptoms have not yet begun is a great challenge. In heart disease, some selected tests that have been found to be useful are inflammatory markers in the blood (such as C-reactive protein, or CRP), ultrasound of the neck arteries, and a calcium-scoring CT of the heart.

Of all these tests, the detection of calcium by a heart CT has been shown to be the most useful to predict the risk of having a heart attack or dying from heart disease over

the next ten years. However, we are still not clear if everyone in the community or only certain individuals with specific risk factors would benefit from having this test, since we don't know if this approach will definitely help us reduce heart attacks or deaths. Most importantly, it isn't clear if any of these tests can motivate us to change our habits to prevent this widespread disease.

How Bad Is the Situation, Really?

In the US alone, the burden of chronic diseases and conditions is staggering. Heart disease, stroke, diabetes, cancer, arthritis, and obesity are the most common, most expensive, and most preventable of all health problems. Seven of the top ten causes of death in 2010 were chronic diseases. Two of these chronic diseases—heart disease and cancer—together accounted for nearly half of all deaths.

Every year the American Heart Association works with the Centers for Disease Control and Prevention and the National Institutes of Health to provide a statistical update on the current trends in heart and vascular disease (such as stroke), as well as the risk factors for these conditions. This extensive data is difficult to mine and organize and is a task that takes years; thus "current" data lags behind by about three to four years. According to this data, one American succumbs to heart (and vascular) disease every forty seconds, a third of whom are under the age of seventy-five years. However, there *is* some good news.

Although heart disease still results in one of three deaths in the US, deaths from heart and vascular disease have declined by a whopping 30 percent over ten years (2000–2010).⁸ Overall, there has been a 41 percent decrease in death from heart and vascular disease over the last seventy-five years, attributed to the development of new therapies and procedures, education, and early diagnosis.

Modern Therapy for Heart Disease

If Mark had collapsed with a heart attack just a half century ago, we would have prescribed bed rest and morphine—that is, if he made it to the hospital. His survival would have been shortened, and he'd be disabled for the rest of his life. Thanks to the availability of cutting-edge therapies, his artery was opened in time by a procedure known as angioplasty, which we will explore below. Two decades ago (and even now in many hospitals), he would have received clot-busting medicines to open up his blocked artery.

Clot-Busting Medicines

In the 1980s the development of clot-busting medicines began to improve the survival rate of patients having heart attacks. Understanding that blood clots clog up arteries and cause heart muscle to die, researchers took to using these medicines at the first sign of a heart attack, showing a significant decrease in death and disability. Soon, not giving these medicines on time was considered malpractice. However, the next phase of treatment was going to change our approach even further.

Angioplasty

In 1977 Dr. Andreas Gruentzig, working in Switzerland, inserted a tiny balloon into a blocked coronary artery, and when he inflated the balloon, the artery opened up to restore blood flow. As expected, angioplasty took the world by storm and quickly became the preferred treatment for blockages in coronary arteries. Hundreds of clinical trials found angioplasty to be effective in relieving symptoms in chronic stable angina and saving lives during heart attacks.

Soon angioplasty was supported by using "stents," tiny tubes with mesh-like walls that act as a scaffold for the artery. Further research trials using various types of stents (including the latest ones that are coated with medicines to keep the artery open for longer periods of time) have demonstrated unequivocally that angioplasty and stenting are far superior to clot-busting medicines to treat heart attacks. This is how Mark's heart attack was treated.

Open-Heart Surgery

In addition to the clot-busting medicines and angioplasty that were groundbreaking innovations in heart disease, coronary artery bypass surgery was a radical procedure to treat blocked coronary arteries. In this procedure the heart is stopped temporarily and the body is hooked up to a heart-lung machine while the surgeon works on the arteries.

Arteries and veins from other parts of the body are used to "bypass" the blocks by hooking one end to the aorta and the other to the coronary artery beyond the blockage. In all of medicine, this is one surgery that has been shown to decrease symptoms and prolong lives, particularly in those with diabetes and blockages in all three coronary arteries.

After the angioplasty procedure, Mark was observed in the intensive care unit during his recovery. By the second day he was breathing on his own and was unhooked from the ventilator. On the fourth day he was sitting up in bed after a liquid breakfast and began to feel uneasy. An EKG didn't show anything, but Mark continued to deteriorate and became severely short of breath. The team ordered a stat echocardiogram, an ultrasound of the heart, that showed severe leakage of the mitral valve.

To keep the blood flowing in the correct direction, the heart is equipped with four valves: mitral, tricuspid, pulmonic, and aortic. Their function is to separate the chambers—the tricuspid and mitral valves separate the atria, the upper chambers from the ventricles, the lower chambers. The pulmonic valve separates the right ventricle from the pulmonary artery, which carries deoxygenated blood to the lung to be purified. The aortic valve separates the left ventricle from the aorta, which carries oxygenated blood to the brain and the rest of the body. If the valves become too tight, blood cannot flow easily into the next chamber. If they become too loose, they leak blood back into the previous chamber.

Mark's heart attack had damaged the apparatus of the mitral valve, making it too leaky. Even though the artery was opened with angioplasty, the damage had already been done and was showing up now. Blood from the left ventricle was flowing back into the left atrium; the sudden change in pressure overworked the lungs, which filled up with fluid and made him short of breath. He needed emergency open-heart surgery.

In the operating room the surgeons saw that almost the entire muscle apparatus of the valve was dead and decided that replacing the valve was the best option. Mark was wheeled back into intensive care eight hours later.

Implantable Cardioverter-Defibrillators (ICDs)

As Mark and Janice discovered the hard way, blockages in the coronary arteries and heart attacks can disrupt the electrical pathways and cause lethal heart rhythm problems. Mark eventually recovered and went home two weeks later. Three months later an echocardiogram was repeated to see if his heart muscle had recovered fully and if he needed an implantable cardioverter-defibrillator.

This life-saving device monitors the heart rhythm continuously and provides a shock at the first sign of a dangerous rhythm. Weak heart muscles have such disruptions in their electrical pathways that these dangerous rhythms can come on suddenly and unpredictably. Implantable defibrillators are some of the most useful innovations in modern therapy for heart disease. Mark's heart muscle had suffered extensive damage but had recovered with the life-saving procedures and the powerful medicines he was prescribed. He did not need an ICD.

Medications

Along with procedures and surgeries, advances in pharmaceuticals have radically changed how we treat heart disease. Among the many remarkable medicines are statins that lower cholesterol; beta-blockers that lower blood pressure, decrease the heart's oxygen demand, and improve heart function; angiotensin-converting enzyme inhibitors that prevent the heart from restructuring itself in a dysfunctional fashion and protect the