# PRAISE FOR HEAL ENDO

"It is rare to find a single resource that is as comprehensive and user-friendly as this book, especially for such a common, widely misunderstood, and understudied condition as endometriosis. *Heal Endo* manages to cover what could take months or years in 1-1 work with an empowering root cause approach. This book has the potential to help countless people break the cycle of painkillers and surgery and find lasting relief from endo."

#### -Ayla Barmmer, MS, Registered Dietitian, Co-Founder of Women's Health Nutrition Academy, CEO FullWell

"Whether you're newly diagnosed with endometriosis or have been living with it for years, *Heal Endo* will deepen your understanding of this disease and clear the confusion. By reframing endometriosis from a "women's issue" - relegated to the realms of gynecology - to instead a body-wise disease fraught with immune dysregulation, we can change our current mainstream approach to addressing this complex disease."

#### -Dr. Jolene Brighten, Bestselling author of Beyond the Pill

"Katie Edmonds has written a truly comprehensive and compassionate guide to endometriosis. *Heal Endo* provides readers with a revolutionary approach to understanding and treating this condition. It includes the latest research on how endometriosis develops, effective treatment protocols, and how to live an endo-healing life. This book is definitely one to have on your shelf!"

 -Nicole Jardim, Certified Women's Health Coach, Author of Fix Your Period "Something unusual happened to me while I was reading *Heal Endo . . .* I started to experience hope. As someone who has personally battled with the most invasive form of endometriosis, enduring excruciating pain, three surgeries, and the loss of organs and fertility over the course of several decades, and someone who has professionally supported others on their endo journeys as their health coach & nutritional therapist, I can honestly say that Katie's book is a very rare glimpse of hope for the treatment of endometriosis. Such a complex disease requires a nuanced approach and Katie has successfully woven all the threads together."

## -Angie Alt, CHC, NTP, co-author of *The Autoimmune Wellness Handbook*

"In this beautifully illustrated book, Katie Edmonds, an endo warrior herself, offers easy-to-follow recommendations for supporting women with endometriosis to reduce the chronic and systemic inflammation that often amplifies endometriosis symptoms. She helpfully explains how endometriosis is a systemic disease and must be approached with integrative and systemic healing strategies. Of course, I am in strong agreement. I especially enjoyed her detailed recommendations on stress buffering and management which is a huge part of living healthfully with endometriosis but is not discussed often enough."

# -Dr. Jessica Drummond, DCN, CNS, PT, Founder and CEO of The Integrative Women's Health Institute and author of *Outsmart Endometriosis*.

"It's about time we approached endometriosis from an inflammatory perspective. The combination of a one, two punch for endometriosis — 1) decrease inflammation and immune upregulation and 2) excision of endometriosis — in combination, are the ideal approach to 'beat' and 'heal' endo. Kudos to Katie!"

-Dr. Iris Kerin Orbuch, Director of the Advanced Gynecologic Laparoscopy Center in Los Angeles, Author of *Beating Endo:* How to Reclaim Your Life From Endometriosis. "What an amazing book!!! This book will be the 'gold standard' resource for patients with endometriosis. Outstanding!!! *Heal Endo* will certainly help save many women with endometriosis unnecessary pain and suffering. It has been an honor to work with you and help with this project."

#### -Dr. Andrew Cook, Founder and Medical Director of the Vital Health Endometriosis Center

"This book is a gift to the endo community at large. Truly, the depth and breadth of research that went into making this book is astounding, and the way Katie is able to break down the science in interesting and understandable language is simply invaluable. I expect that it will become a widely circulating book among both those living with endo and those who treat it."

### -Merritt Jones, DAIM, LAc, CNC, Clinical Director at Natural Harmony Reproductive Health

"For ten years I have read *all the* books, articles, and been down hundreds of rabbit holes about my endometriosis diagnosis. But after reading *Heal Endo*, for the first time in my life I felt like I could understand this beast of a disease. *Heal Endo* will help you answer so many of the questions that have left you feeling hopeless and, for possibly the first time, give you a sense of optimism for the future. No matter where you are in your endo journey, whether you've just been diagnosed or have had multiple surgeries, *Heal Endo* will help you connect the dots of YOUR endometriosis and give you direction and hope. Not only will this book help you understand your body so much better, but Katie clearly lays out every step you can take to give your body the best chance of finding remission."

#### -Roxanne van Zyl, Endometriosis Health Coach

Real ENDO



An Anti-inflammatory Approach to Healing from Endometriosis

Katie Edmonds, (F)NTP

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To everyone who's suffered from endometriosis. And to my daughter, Nola, may your journey be different.

## **Table of Contents**

Foreword	12
Preface	15
PART I: ENDOMETRIOSIS 2.0: A MODERN UNDERSTANDING	
Chapter 1: What Is Endometriosis, Really?	20
Chapter 2: Doctors, Diagnosis, and Endo Confusion	31
PART II: THE PERFECT STORM: HOW ENDOMETRIOSIS DEVELOPS	
Chapter 3: Making a Monster: The Creation of an Endo-Like Cell	48
Chapter 4: Your Immune System Establishes Endo Lesions	62
Chapter 5: Endo's Secret Little BIG Trigger: Bacteria	77
Chapter 6: Hormones: Are They Really the Enemy?	90
Chapter 7: A Strategic Path Forward	102
PART III: HEALING WITH NUTRITION	
Chapter 8: A Nutrient-Dense Diet	109
<b>Chapter 9:</b> Macronutrients: Carbohydrates, Fats, and Proteins in Balance	140
Chapter 10: Foods That May Not Help	164
Chapter 11: The Joy of Food	183

#### PART IV: BEYOND NUTRITION – AN ENDO-HEALING LIFE

Chapter 12: Move More and Move Better	196		
Chapter 13: Mending the Microbes	215		
Chapter 14: Balancing Your Hormones	234		
Chapter 15: Reducing Your Toxic Burden	255		
Chapter 16: Coaching for Your Doctors' Appointments	265		
Chapter 17: Removing Endo: Surgery			
Chapter 18: Ten Endo Rules to Live By	292		
Further Reading	303		
Appendix 1: Alterations of an Endo-like Cell	307		
Appendix 2:Immune Dysfunction of Endo			
Appendix 3: Dysbiosis Trains Endo-Immune Behavior			
Appendix 4: Core Dysfunction	315		
Appendix 5: Dioxins in Food	321		
About the Author	323		
Index	324		
Endnotes	325		

## **FOREWORD**

by Dan C. Martin, M.D., Scientific and Medical Director of the Endometriosis Foundation of America

Katie Edmonds is a force of nature in birthing an amazing and wonderful book covering the spectrum of endometriosis. Throughout *Heal Endo* she not only presents the modern understanding of endometriosis but also integrates contemporary therapy, complementary methods, alternative medicine, and body ecology in an easy-to-read style that makes this book useful to beginners and experts alike.

Katie has avoided the tendency of social and mass media to focus on one aspect of endometriosis development and/or treatment at a time, and instead offers suggestions on how to integrate multiple healing possibilities into individual care. She understands that all women are different and need individualized approaches to their care—that's why we need better answers for the care of those with endometriosis, and this book is one of them.

As with much of my life that has benefited from serendipitous events (as predicted by Louis Pasteur's "chance favors the prepared mind"), I was invited to write this foreword at a time when I myself was reviewing a theoretical plan to proactively decrease the inflammatory responses of endometriosis and endometriotic progression so that women can avoid surgery and chronic morbidity, including pain and infertility. This plan was based on a variety of research documenting women with endometriosis that is either not active, not causing problems, or not progressing—endometriosis that had been "stopped" in some way without surgical intervention.

To understand why, we need look no further than the immune system. When the immune system works, it is capable of inactivating, stabilizing, and clearing endometriosis. If we can harness the innate ability of the immune system, we may improve the lives of women and transgender men. While we of course must be diligent in seeking earlier and better treatment for those with endo-

metriosis, we can remember that endometriosis is not always a devastating disease, especially if we can approach it with a modern understanding of the immune system, and a unique care plan for those suffering.

This book does exactly that, making a case for additional, complementary, and alternative medicine with compelling logic. Katie's suggestions have stood the test of time and have helped give women control over their illness. As she points out, endometriosis is only one of many inflammatory triggers that can cause disease. Others include lethargy, loss of sleep, decreased activities, and many other daily problems. Because no single approach will be helpful for all sufferers, and because no one treatment works for everyone, understanding what has helped others gives important guidance for what to try. What has worked for one may work for others, so the numerous approaches presented within may offer useful new opportunities for treatment.

Heal Endo covers the basics of what I learned in medical training. The sections on the endocrinologic and immunologic concepts of endometriosis could be a primer in college or medical school or in a postgraduate course for older physicians who were not trained in these concepts. It's a \$200 medical textbook on immunology written in plain English for the price of a consumer text. It also includes alternative treatments that sufferers and their friends, families, and providers need to know about but can be difficult to find. There are very few providers who will understand all of them. I have studied endometriosis for more than 50 years but did not know, much less understand all the available treatment options. I doubt there are many people, including providers, who do.

This comprehensive volume covers systemic inflammation, regulation of the immune system, cellular clearance, immune dysfunction, autoimmunity, environmental factors, epigenetic alterations, anti-inflammatory diets, the role of a properly done excision surgery, complementary and alternative methods, triggers, healing the gut, mucosal immunity, and decreased oxygenation. As Katie points out, this research is available despite the underfunding of endometriosis research compared to other medical issues, showing there is still much that is being done. (Note that PubMed has added almost 2,000 papers on endometriosis in 2021, with more than 1,000 on treatment).

Foreword 13

Yet, as a researcher, academic, and former surgeon, I intimately understand the divide between what research has uncovered and what the average sufferer (or doctor) knows about this disease, a divide this book aims to address.

Perhaps the most important takeaway is this: the care of endometriosis is more than the care of the individual lesions; it is the care of the entire body. The more we can remember that endometriosis is a full-body issue and commit to taking full-body care, the better these sufferer's immune systems will function, leading to better management of their endometriosis.

Dr. Martin is the Scientific and Medical Director for the Endometriosis Foundation of America. He has studied endometriosis since 1970 and to date has 443 publications, with most on endometriosis. He's taught in full-time and clinical academia for 44 years with 27 of those from a private practice offering professional excision surgery. Dr. Martin is on the editorial boards of four medical journals. He is the past President of the AAGL (formerly the American Association of Gynecologic Laparoscopists) and the Gynecologic Laser Society. You can find him at www.danmartinmd.com

## **PREFACE**

Endometriosis really knocked me sideways. It came on hard and fast; one moment I was a healthy, athletic young woman, and the next I was rolling on the floor with an astounding level of pain. During the years after my diagnosis, I unraveled, becoming sicker, enduring chronic pain, and feeling more exhausted. My hair broke off and my belly bloated. Doctors didn't give me much hope that I could turn it around. When I wanted babies and conception eluded us for years, I was told I would have to resort to IVF... or just have a hysterectomy and adopt.

There was nothing like being sick and tired of being sick and tired to motivate me to question everything I had been told about this disease. I was in my late twenties, with a deep desire to have children. Yet I was terrified of coming off the birth control pills that were supposed to alleviate my endo symptoms, even though they weren't helping very much.

I kept wondering, why was I slowly getting worse if I was diligently following the commonly prescribed path of hormonal birth control pills, painkillers, food restriction, and multiple rounds of surgeries? If estrogen was my problem, why was nothing helping when I did everything possible to lower estrogen? Why was I suffering body-wide issues if endo was relegated to my pelvis? Having had two surgeries previously—which showed there was no physical impediment preventing pregnancy—why was I still infertile? Anger and frustration at the unfairness of the situation fueled my research.

My journey of discovery uncovered new truths about endo, although these truths (shockingly) weren't new discoveries. Researchers have long known that endometriosis is an inflammatory disease and that there are multiple factors that drive the inflammation—and multiple ways we can heal from it. But this information was brand new to me, and it changed the entire way I approached healing.

Preface 15

Instead of my laser focus on "problematic estrogen," I suddenly understood how I could incorporate many diet and lifestyle changes to help re-regulate my immune system, quell chronic inflammation, and heal from within. It helped me understand that while birth control was helping suppress the symptoms, it wasn't fixing the problem. It allowed me to realize that a holistic approach wasn't just helpful for endo, but necessary.

While it was surprising to discover the disease I was suffering from was, in actuality, quite different from the disease I had thought it was, it was not nearly as shocking as finding my endometriosis slowly fade into full clinical remission. I had never been told this was possible. Yet here I was, a few years into new holistic healing therapies, discovering my chronic fatigue had dissolved, my digestive woes had healed, my chronic pelvic pain had vanished. Even more, I found my body capable of healing from three years of infertility and it has since blessed me with two children (cue happy tears).

This discovery that endo doesn't have to be a life sentence led me on the path I'm on today. I went back to school to become a Functional Nutritional Therapy Practitioner (FNTP) in order to work exclusively with endo sufferers. I also started a successful website about holistic ways to approach this disease (www. healendo.com) and published *The 4-Week Endometriosis Diet Plan* to help sufferers create a new type of roadmap to healing.

But after years of connecting with so many sufferers around the world, it became more and more apparent just how much frustration remains around the lack of understanding about this disease, and how that's hurting treatment options. We hear that we need more research and, yes, we do—funding for endo research is pitifully low. Yet, science knows a lot more about endo than you may realize. A search for scientific publications in early 2021 listed approximately 30,000 endo-related scientific articles on PubMed, and 425,000 on Google Scholar—with an increase of about 5 new papers *daily* during 2020. That means there has been really *quite a bit of new research* released in the past few years.

I no longer believe that getting a diagnosis should feel like the beginning of the end. Neither should you. That's why I wrote this book.

The question I kept coming back to in my research was whether I was an outlier or anomaly as someone who was able to put her endometriosis into "magical" remission. After extensively researching endometriosis both in the literature and in patients' personal journeys, I have found the answer to be: no. There are many sufferers who have curtailed their disease through diet and lifestyle, Western medicine, complementary and alternative medicine, a properly done surgery—or any combination of these. They may have been able to achieve full clinical remission like me, or have found a place on the partial remission spectrum where they have symptoms that are manageable rather than life-destroying.

It's clear that endometriosis, a disease that radically and terribly affects the quality of life of *tens of millions* of women, shouldn't have to be devastating. It shouldn't lead a 23-year-old to thinking her life is totally over; a 35-year-old being told her endo damage is too far progressed to maintain a pregnancy; or a 16-year-old in pain being told not to seek a diagnosis for endo, since "nothing can be done about it anyway." It shouldn't mean that you, as a patient, need to know more than your doctor to advocate for your health, while facing doctors who don't take your symptoms seriously and friends and family who just don't understand what you're going through. It should *never* equate to a lifetime of sadness, pain, stress, infertility, sickness, misdiagnosis, or dare I say thoughts of suicide.

So while, yes, we need more research, the goal of this book is to help deliver what we've already uncovered about the disease and how to heal from it. Here I hope to offer a bridge of understanding from endo researchers to you, including how endo is an inflammatory condition, how it may be stabilized or perhaps even regress, diet and lifestyle support mechanisms that help, and why the type of surgery you select matters. It's information the average endo patient has never been updated on—nor many general doctors.

Preface 17

This book will teach you how to better understand your endo and know what steps to take today to start healing from it. Part I will re-introduce you to our disease, what it is, how to get a diagnosis, and working with doctors. Part II will unravel the deeper story of endo, such as how you develop endo and how it's truly an inflammatory disease, rooted in immune dysfunction. Part III and IV will unlock the keys to healing, addressing everything from nutrition to movement, bacteria to chemicals, surgery and more.

I believe knowledge is power, and we together need to make sure this information is better disseminated. We *need* to know what endo is, *need* fast and accurate diagnosis to prevent irreversible damage, and *need* to be offered proper treatment options that have been proven to help. We should be able to have babies (if we want them), and we certainly deserve a life without chronic, unrelenting pain due to an obscure notion that endo is some mysterious "women's condition."

If our own endo story is already written in irreversible ways, we need to make sure our daughters have a chance to avoid the hell we've been through without being told to accept that "it runs in families." We deserve better, all of us, and my hope is that this book helps shift the conversation around endo from one of darkness to one of hope.



Me with my miracle son, and newly pregnant with my miracle daughter

## Part I:

## Endometriosis 2.0: A Modern Understanding

In this section you will be re-introduced to endo as you've never been before; you'll learn what endometriosis really is, the basics of how it's treated, and how to create a new path forward.

## **Chapter 1:**

# What Is Endometriosis, Really?

When I was 23, I had a sudden burst of pelvic pain so intense I thought an organ had ruptured. Within a day the acute pain had minimized, only to be replaced by a deep, chronic pain that needled my every move. I was terrified that I had cancer.

I was "lucky" to be diagnosed with suspected endo within three months of the onset of pain (the average wait time for an endo diagnosis can be up to a decade), thanks to a wonderful doctor who took my pain seriously. However, being told that the pain could be mitigated only through synthetic hormones, painkillers, chemical menopause, or eventually a hysterectomy, isn't what a 23-year-old hopes to hear at a doctor's appointment. I was devastated.

I remember my body-racking sobs that day because I had researched endometriosis, and I'd discovered that its informal tagline is "there's no cure." Sufferers online documented decades of pain, infertility, and health crises. In my mind, I could have done *something* with even a cancer diagnosis, but now my deep, chronic pelvic pain was stamped as "incurable" endometriosis. And it appeared that I couldn't do much about it.

Like the sufferers I'd read about online, I too witnessed a rapid decline in health over the next few years. I had two surgeries recommended and performed by general OB-GYNs. I stayed on the recommended oral contraceptives. I tried cutting out many different foods. While some days were better than others, nothing really helped. Living on the North Shore of Kaua`i, I had formerly been very athletic, but slowly my everyday joys of running, surfing, and active

island life faded into chronic fatigue, joint pain, digestive issues, and chronic pelvic pain—maybe we could call it "unraveling by endo" and I absolutely know most of you reading this can relate.

While miserable, I certainly wasn't alone. Endometriosis is a disease that affects an estimated 1 in 10 women, which is roughly 390 million across the globe. That's a lot of women! One-third of us suffer under a crushing tide of pain, one-third struggle with infertility, and many, many have digestive woes. And yet... up to half of us may have little to no symptoms. It's confusing at first glance, that's for sure.

To cut through the confusion, I started to research the basics. I found that, with endometriosis, abnormal cells that are *similar to* the lining of the uterus (called the endometrium) are found outside of the uterus. These cells develop into endometriotic lesions (i.e., endometriosis), which grow and bleed in response to hormonal fluctuations throughout the menstrual cycle. This is probably why the lesions of endometriosis are so often confused with the endometrium, although they are quite different.

These lesions commonly affect the pelvic organs, including the uterus, fallopian tubes, and ovaries. But endo is not limited to the reproductive organs or pelvis. It's not uncommon for patients to have extra pelvic and distal endo, meaning endo found on other abdominal organs and even outside of the abdomen in places such as the skin, heart, lungs, or the brain.

Although not always, endometriosis can also be progressive. This means, if left untreated, it may advance into worse forms of the disease, along with potentially irreversible scar tissue and adhesions (when scar tissue adheres tissue or organs together). While symptoms of endo are often related to the menstrual cycle, they may also be related to urination or defection, or sometimes seemingly not related to much at all. In my case, I had pelvic pain nearly all the time *except* at menses. Some sufferers never have pelvic pain, but instead have terrible digestive symptoms, maybe joint pain, back pain, unexplained infertility, or chronic fatigue. Yes, endo can be so much more than a painful

period, and that's why treating periods alone hasn't been able to offer many of us the vibrant quality of life we deserve.

Yet, as I was learning the basics, I also learned that things I'd been told about the disease weren't exactly accurate. For example, I had heard that endometriosis is caused by too much estrogen coursing through my body. I'd heard it was some sort of "menstrual disorder", relegated solely to the pelvis. I'd heard that there's really nothing that can be done except for diligently managing symptoms and hoping for the best. If you've Googled endo over the years, you've probably read the same information, leaving you feeling the same despair that I felt. That's why I'm happy to tell you that none of this is entirely accurate.

Here's the truth: endometriosis is an inflammatory condition, rooted in immune dysfunction. Although endo is affected by estrogen, it's not caused by estrogen. And while symptoms are often related to the menstrual cycle and reproduction, endometriosis is really a full-body disease—it's systemic.

Understanding that inflammation was at the heart of endo helped answer questions plaguing me for years: if estrogen is to blame then why is lowering my estrogen not helping? Why is stopping my periods not helping? Why am I so chronically fatigued if endo only affects my pelvis? Why am I dealing with infertility if I only have moderate endo? Moreover, by learning what endo really is, I was finally able to understand what healing I needed to do.

No matter who you are and what your symptoms are, treating the inflammation behind endo is the foundation from which we all can heal anew.

# ENDO, CHRONIC INFLAMMATION, AND IMMUNE DYSFUNCTION

To understand an inflammatory condition, you first have to understand *inflammation*, a bodily process that is often misunderstood. Inflammation is actually

something the immune system *does*. It's your body's fire-breathing dragon protecting you from harm anytime there is an injury or invader. Inflammation should also be short-lived. When there is cellular damage triggered by a cut, scrape, virus, bacteria, or anything foreign, inflammation comes in a burst, sanitizes the scene, and leaves without much fuss while your body heals. Think of all the fevers you've had over the years—body-wide inflammation to protect you from bacteria or viruses that might otherwise have killed you. All those cuts and scrapes you've had? Thank inflammation for keeping infection at bay. So yes, while it can be irritating and painful, you want that immune-based inflammation to protect you. Without it, you would die.

Chronic inflammation is different. If the damaging trigger is never removed, your body is left in that fire-breathing-dragon mode, which will begin to damage surrounding cells, tissues, or organs. That's right, chronic inflammation *creates* more damage. It's why you need the triggers leading to your inflammation to be removed, just like you'd need to remove a fallen eyelash from the eye, or poison ivy from your skin, otherwise they'd continue to do harm.

Not only will chronic inflammation create chronic damage, but it will also start to trigger the immune system as a whole to go a bit haywire, doing things it shouldn't while not doing things it should. This is called *immune dysfunction*, a hallmark of autoimmune disorders, cancers, and endo. Activities that shouldn't be happening inside your body are actually *fueled* by your immune system's confused behavior. In the case of endo, an inflammatory cycle like this is exactly what helps your endometriosis develop into something sinister.

In fact, it's your confused immune system that is responsible for "rooting down" an endometriosis-like cell into your tissue, connecting it to your blood and oxygen supply, to establish a full-blown endometriosis lesion. Yes, you can thank your immune system for this. Moreover, your immune system's defense mechanisms aren't behaving as they should, letting the endo lesions stay rather than clearing them from the body as they should. Once endo is established, the lesions make their own inflammatory immune factors, while the repeated injury from all that chronic inflammation creates scar tissue and

adhesions. This is how inflammation—and the wayward immune response fostering it—becomes the driving force behind endo.

And even though we most often experience issues associated with the pelvis and reproductive organs, endo is actually a body-wide disease. No matter where your endometriosis lesions are, endometriosis actually *affects* and is *affected by* the whole body. It's systemic.

#### THERE'S EVEN MORE TO THE STORY

Because this is such a big transition away from what many of us think endometriosis is (i.e., some sort of period problem), I reached out to Dr. Dan Martin to ask how we should start re-imagining endo in an understandable way. As the Scientific and Medical Director of one of the largest endo nonprofits in the world—The Endometriosis Foundation of America—Dr. Martin suggests thinking about endometriosis in a similar way to another inflammatory issue we're better familiar with...acne.

First of all, acne is *heterogeneous*, meaning there are different types of acne (seven to be exact). You may be surprised to know there are different types of endo too, currently four, although this list will likely expand.<sup>2</sup> Research has already isolated up to 65 different endo phenotypes with potential differences in behavior, physical form, and biochemical properties!<sup>3</sup> This means one day your endo diagnosis may not just include stage and location. It may also describe your type (or types) of endo, which could be more aggressive or stubborn, or perhaps more associated with pain or infertility. Just as some small pimples hurt terribly while some large pimples can be ugly with no pain at all, different types of endo can behave in different ways. The fact that there are so many different types and behaviors of endometriosis is one reason that it is so complex to diagnose and treat.

Secondly, acne is *multifactorial*, meaning there are many factors that contribute to disease development, such as bacteria, hormones, irritating chemicals

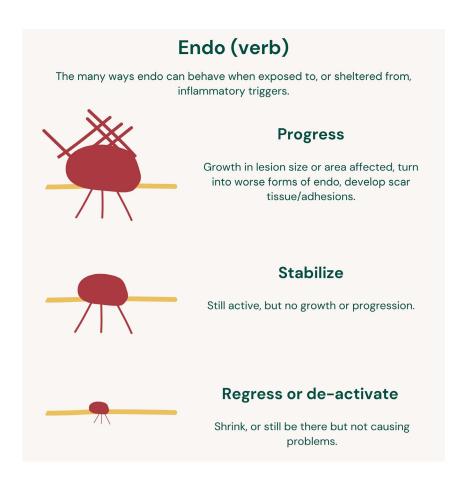
from skincare, stress, or food intolerances. Endo too is multifactorial, with different factors that drive the making and progression of (different types of) endo. And the factors don't line up the same with every patient. No, you didn't just "catch" endo, even if you were like me and felt symptoms come on fast and strong. And yes, other sufferers may have had their own endo develop from circumstances different than yours. Endo develops through a complex symphony of factors that together create the chronic condition you're facing today.

Third, certain types of acne are affected by *estrogen*, a potent trigger of inflammation and increased zit formation for some, yet acne is not a "hormonal disease." Rather, hormones become one trigger of many. Endo too is estrogen-sensitive, but it is not caused by estrogen either.

Of course, endometriosis isn't *exactly* like acne, so please don't be offended by my likening your level 10/10 pain, or the adherence of your ovaries to your bowel, with a bad zit outbreak. Yet, understanding endo as a heterogeneous, multifactorial disease of inflammation—like acne—*is* the cornerstone of this book. By viewing endo in a similar way to this well-known condition which can progress or *regress*, sometimes with lots of intervention and sometimes without, that can be painful or not, cause scarring or not, and which develops from different factors into different types of disease depending on the sufferer, we can begin to re-imagine endo in new ways.

### THE ECOLOGY OF ENDOMETRIOSIS

This idea that endometriosis can stabilize without progression or scarring, regress in size and volume, or simply continue to exist without causing problems, may be news to many, but it's well-documented. One review found that while 29 percent of those with endo had disease that ended up progressing, 42 percent actually showed disease *regression* and 29 percent remained stable.<sup>4</sup> Another review of healthy, fertile women having their "tubes tied" to prevent pregnancy found asymptomatic endo in nearly 6 percent of these women at the time of surgery—with lesions that were established but not causing problems.<sup>5</sup>



Understanding that endo lesions can grow *or* shrink, and be active or not, highlights the important point that endo is not so much a noun (something static and unchanging) as it is a verb (a process unfolding that can change over time). In other words, if we have active endo we are *endo-ing*. This shift in perspective gives us back control in many ways over our disease. We can't do much if we believe we just *get* endo, but we can seek real solutions if we understand that many elements go into endo-ing.

Endo (verb): To endo; endo-ing. The many processes that spur the development and progression of endometriosis. New Goal: To stop endo-ing

To better understand how this is possible, I'd like to introduce the concept of whole-body ecology. Ecology itself is the scientific study of the interconnected relationship between living organisms and their environment. For example, when studying the health of a tree you must also look at the bugs, grass, rainfall, animals, and even wind patterns the tree is in contact with. Each contributes to overall tree health, and the forest ecology at large. Using this example, we can use the term "whole-body ecology" to describe the same type of interwoven relationship between the eleven main systems within their environment, the human body:

- Immune system
- Endocrine (hormonal) system
- Circulatory system
- · Digestive system
- · Exocrine (skin, hair, nails, and sweat) system
- Muscular system
- · Nervous system
- · Urinary system
- · Reproductive system
- Respiratory system
- Skeletal system

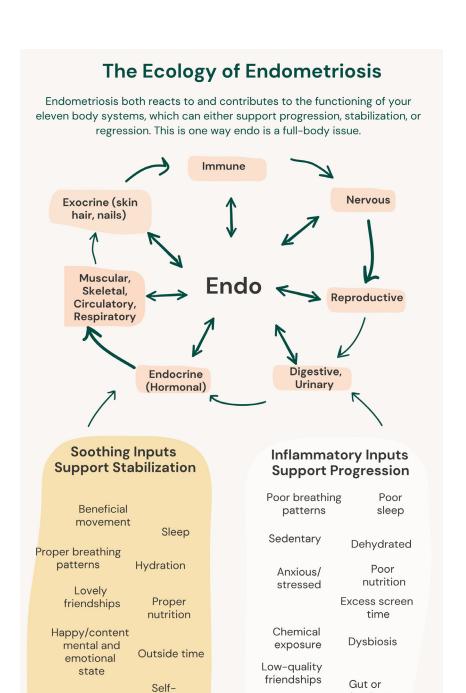
Like forest ecosystems, our bodily systems respond to information they pick up from our environment, our everyday living, to operate. And the operations of each system affect other systems. This is how stress can affect the muscular system, how immune health affects the reproductive system, or how our breathing affects the digestive system. They're all connected through vast networks of communication channels. You could imagine extensive text threads between these systems that, quite literally, never stop.

To properly function, these systems *all* rely on a continuous stream of healthy, soothing inputs. This includes proper nutrition, hydration, a calm and loving mental/emotional state, proper breathing patterns, adequate sleep, few toxins, and so much more. When most inputs are beneficial like this, these systems will communicate properly, working in harmony to maintain balance in the body.

The problem begins when modern-day living slaps our body ecology with so many negative inputs that our systems respond in more problematic than beneficial ways. Too much battery from negative inputs will, over the years, start to create dysfunction within these systems and the communication between them. What emerges is an inflammatory body ecology that benefits endometriosis—development, progression, or even just symptoms. It's how pathogenic bacteria from the digestive or reproductive tract may stimulate lesions to grow, while removing bacterial overgrowths may support the regression of lesions; how nutrient deficiencies may foster endo progression, whereas nutrient infusion may help curtail disease; how high levels of stress hormones may increase lesion size and volume, whereas the elimination of stress hormones may prevent endometriosis recurrence. This is why diet, lifestyle, and complementary methods that support whole-body health are essential considerations when healing from endo.

Conversely, once endometriosis lesions are established they don't just respond to body ecology, but actually start to contribute to the equation. It's how endo can increase the level of stress hormones in the body by creating chronic pain or other health challenges, impact the reproductive, urinary, or digestive system through tissue damage or associated inflammation, create disruptions in the nervous system through pain that never ends, and so much more. In this way, it's almost like endometriosis becomes a bodily system of its own (think of it as you now have twelve!)— one reason why endometriosis is considered a full-body disease, both impacting and being impacted by a whole-body ecology gone rogue. This is why expert surgical removal of lesions is currently considered the "gold standard" treatment for endo removal, and an important step to consider. All of this we'll touch on in-depth in the coming chapters.

Yet, suppose we can tip back the scales from sickness to health, from inflammatory to soothing inputs for all our bodily systems. In that case, we may stand a fighting chance against endo. If you stop the inflammation in its tracks, you may be able to stop endo-ing. If you've met or heard of women who managed their endo to the point where it no longer causes them problems, then you've seen this in action.



Healthy

microbiome

compassion

reproductive tract

infections

## If you stop the inflammation in its tracks, you may be able to stop endo-ing.

## A STRATEGIC PATH FORWARD

When I started to approach my endo in new ways to address endo's many components, I finally began to see the profound healing shifts I needed. At the time I had no idea that my journey of recovery would first benefit from focusing on seemingly unrelated issues: healing the gut, improving my nutrition levels, sleeping better, de-stressing, and improving my breathing and movement patterns. Within a year the clouds lifted, my vigor returned, and the pain subsided. I felt *good* again, and not just for a day here and there, but for nearly a decade now. My fertility returned, and I'm now blessed with two little miracles of my own.

This approach admittedly may not be a quick fix, but rather a lifestyle overhaul, based on a deep understanding of the newest science behind endo. It is inspired by my own path and by those of the many women I've had the privilege of working with over the years. So I ask, what if you could find the triggers that contribute to your own endo inflammatory cascade, address them to free up your immune system to function correctly, and feel your own endo ease? Or, after surgery, how can you best prevent endo from returning and the slew of symptoms from creeping back? These are the questions this book answers by looking at endo from a modern perspective: as an inflammatory disease rooted in immune dysfunction.