LOST IN LYME

The Therapeutic Use of Medicinal Plants in Supporting People with Lyme Disease

JULIA BEHRENS



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Julia Behrens

with **Daphne Lambert**



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ABOUT THE AUTHOR

Julia Behrens is a qualified practitioner in herbal medicine with a degree from the College of Phytotherapy, graduating with honours in 2000. She trained with Hein Zeyelastra. She is a member of the College of Practitioners of Phytotherapy (mCPP) and has diplomas in nutrition and therapeutic massage. Julia has taught at the School of Herbal Medicine, lectured at East London and Westminster universities, consulted for the WWF, and worked at Neal's Yard Remedies. She runs a range of courses in herbal medicine for schools and community groups, including at Phoenix Community Centre, Plumpton College, and the Heartwood Education Foundation. She has published articles about the conservation of medicinal plants in the *European Journal of Herbal Medicine* and for WWF and Plantlife, and is a co-author of *Healing Herbs* (Dorling Kindersley, 2020).

She participates in the Future Health Project, a Brighton-based organisation of GPs, practitioners, community workers, and developers. The project is part of the humanities in future health network at the University of Sussex, bringing together Sussex academics and local health and arts partners to explore ideas for future collaborations in the delivery of health care in the twenty-first century.

She works in clinics in Brighton, Hove, Bristol, and Eastbourne and alongside doctors at the Integrative Herstmonceux Health Centre in Hailsham, where she designed a herb garden for the patients there to use.

Together with Daphne Lambert, she runs a series of workshops for the Greencuisine Trust, including well-women retreats and workshops, raising awareness of plants and food that can help those with Lyme disease.

Julia applies sustainable and holistic principles in both her medicinal practice and treatment of clients. She makes many of the herbal preparations she uses herself, mindful at all times of how the plants were grown and harvested.

She was invited to join and help set up a Lyme clinic at the Herstmonceux Integrative Health Centre, which was established in 2015 with a focus on providing a holistic approach to treating patients with

Lyme disease. She was part of a team with Dr John Simmons and Tanya Borowski, a functional medicine practitioner. The use of bespoke herbal protocols, regular patient discussions, and a collaborative approach to care resulted in the clinic attracting clients from all over the world, with some clients even funding treatment programmes for less fortunate patients. Having all practitioners under one roof allowed for seamless collaboration and a unified approach to patient care. This resulted in a wellness system that ensured each patient received the best possible treatment. Despite its success, the Lyme clinic disbanded in 2017 due to the pressures of working within an NHS setting and the desire of some team members to pursue further research and other interests.

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I owe an enormous debt of gratitude to those many, many people who have supported me in countless ways. My special thanks go to my clients, and sponsors who have trusted me and the herbs and contributed their experience to this book, who have found healing and direction, motivating me to share and continue my work, and whose unheard voices I hope can be heard though these pages.

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Disclaimer

The information in this book is intended for general information only. It is not intended to amount to advice on which you should rely and is not a substitute for diagnosis by a qualified and experienced health professional.

Any potentially serious health conditions should be evaluated by a qualified health professional. Most herbs and supplements have not been thoroughly tested for their interactions with other foods, herbs, or medications.

HOW TO USE THIS BOOK

I have written this book on the therapeutic use of herbs in the treatment and support of people with Lyme disease to share my knowledge and experience in using herbs alongside conventional treatments.

I also want to educate others on the potential benefits and risks of using herbs in managing Lyme disease and to provide a resource for those seeking alternative or complementary treatments for the condition.

The book can be used as a resource in several ways:

- Chapter by chapter: You can read the book cover to cover to gain a comprehensive understanding of the topic.
- Dip-in approach: You can use the book as a reference by dipping in and out of different chapters or sections based on your requirements.
- Plant-specific information: You can use the book to look up information on individual plants and their use in treating Lyme disease.
- Client stories: The book includes client stories, highlighted in green. You can use these as examples to see how others have used herbs or experienced their Lyme disease journey and what results they have achieved.
- Self-help strategies for managing Lyme disease, including information on food and nutrition, recipes, essential oils, and pain management.
- Future developments in the treatment of Lyme disease, including growing your own medicine.

Once you have gained an understanding of the basics of Lyme disease and the various treatment options available, you may want to consider reaching out to a practitioner for personalized guidance and support. The final chapter, on practitioners, can provide you with information on where to start and what to expect when working with a practitioner.

Remember, taking care of your physical and mental health is an ongoing process, and it is important to work closely with your healthcare provider to develop a comprehensive personalised treatment plan that is right for you.



Introduction

It has been my privilege for over 20 years to work with doctors and hundreds of clients who have found that an effective way to treat Lyme disease is herbal medicine. The infection can be quite overwhelming, so this book sets out to offer readers, at a time when they may feel quite lost, a comprehensive overview of the disease and its treatment.

Herbalism, which is both an ancient art and a modern science, is the most widely practised medicine worldwide – the primary form of health care for 80% of the planet, according to the WHO. In the past, it was through trial and error that our ancestors discovered the healing power of plants. Nowadays, a more scientific approach is taken in understanding the medicinal properties of herbs.

Herbal practitioners use diagnostic skills similar to those in orthodox medicine but with preparations made from the whole plant to treat their patients, whereas orthodox practitioners use isolated compounds from plants, or synthetic drugs. A herbal practitioner treats the whole person rather than just the symptoms, based on the philosophy that the suppression of symptoms alone does not lead to complete health, because the underlying problem is not addressed. Herbal medicine can be used both as preventative medicine and as a treatment to improve general health and vitality. It is suitable for people of all ages, from babies to the elderly.

Herbal medicine can be used in a wide range of ways: to help reduce inflammation, manage co-infections, regulate hormones, detoxify, and replace nutrients depleted in the body. Herbal medicine can also help protect the body by enhancing the immune system, reducing the side effects of medications, alleviating symptoms resulting from ill health, and helping to relieve stress.

When, as a child, I had the first signs of a cold or couldn't sleep, my mother would get out a large wooden box, inside which was her domestic apothecary, with herbs and tinctures she used to make teas. She would make an aromatic foaming hot bath with bubbles, sent with love from her home country, Germany. I would drink the herbal tea she made and lie down in the steamy bath. When I could no longer tolerate the heat, I would get out of the bath, and my mother would wrap me in towels and blankets, joking that I was like an embalmed Egyptian mummy. I thought I would melt beneath the covers, but knew I would feel better; eventually I fell asleep, and, within that cocoon, the increase in temperature helped my immune system to respond to the infection.

As long as I can remember I have had plants in my life. I often collected them as a child. I vividly remember pharmacies in Germany, where I visited when I was young. They had flowers in bottles, lavender for headaches, common sage for sore throats, and rows upon rows of tinctures on their shelves. The pharmacists wore white coats and asked questions. They were kind and placed an extra packet of white tissues in every bag, just in case.

When I was 18, my mother died. I think the helplessness I felt affected me in more ways than one. I wasn't prepared for death, or for life. My body knew what to do: I cried, I froze, and then I ran until I could cry and run no more; then I slept. I share this with you for I have been lost in pain and found a path and chose to help others find theirs, with plants as a guide.

We all have our burdens to carry, some more visible than others, with mixed outcomes, depending on the path we have chosen to take or the support we have. Sometimes we feel out of our depth, at breaking point, lost, not knowing what to do or where to go. I travelled and found huge comfort in plants, nature, and the people I met on my journeys. I found that it was the healing plants, time, and the kindness of others that offered me healing solutions. My pharmacy is world-wide, not exclusive or accessed through white coats "just in case you need it"; it is encapsulated and rooted in nature and, if stored well, is accessible throughout the year.

Hungry to learn about plants, I started working for Neal's Yard Remedies. Unlike a health shop, it was a natural dispensary, with creams and tinctures to make you feel good. The aroma from the blue bottles was familiar, bringing back vivid memories of my childhood. The bell chimed and the learning started when the door opened and people



came in, searching for comfort and answers. Some people would bring jars with specimens, in the hope that we could identify the contents; some would even attempt to disrobe in the hope of a physical examination. I learned, I listened; people left with labelled instructions, creams, and bottles of herbs or tiny white pills. Some may have found what they needed. For others, the shop was just part of their signposting so as not to get lost on the journey as they searched for the healing solutions they needed.

Even after completing a degree in phytotherapy (herbal medicine), followed by countless hours of clinical practice, I know that it was the shop and its customers that trained me to think on the spot. I would go home and research the questions that had been raised during the day. Eventually, I could almost hear a ringing sound alerting me to help find among the rows upon rows of bottles and dried herbs the ones that would work best. I would pluck the brown medicine bottles off the shelf like plucking the strings of a harp, ponder and listen, replacing one in favour of another, information flooding my brain. I know this feeling well: my music is the pouring of the liquid, the clinking of glass, the varying pitches of the different measuring cylinders, the stirring and stickiness of the cream.

Knowing which multifaceted liquid will perform its optimum functions in the body when taken in one form or another is like hitting a note in tune with the others. I know that what feels to me like instinct in identifying the correct procedures to follow is actually based on the knowledge drawn from years of study, poring over countless papers and books, and extensive experience of treating my patients.

The plants in the shop had common names, yet for me the Latin classifications held more meaning: "*Leonurus cardiaca*" rolls off my tongue like a musical spell. I also appreciate that using Latin has helped practitioners gain insights across borders and throughout time. However, the shop floor also reminds me to connect in a language we all understand: to keep it simple, so clients don't feel lost in words.

I am an explorer, a medic, mother, daughter, hunter-and-gatherer of knowledge and plants. So, was it the antler chandelier that I inherited from my hunting ancestors that lead me to the trail of Lyme disease? Or the doctor who asked me to join his Lyme team to work collaboratively? Well, he certainly inspired me to travel far to Lyme lectures and research across the world – but no: it was just one person who needed help in unravelling the patterns in symptoms, making connections others may have missed; one single client who tested everything I had learned and prompted me to keep learning and to find answers.

Maybe I was primed at a young age by those detective films and medical mysteries I watched with my grandma now playing out in real life: measurements have consequences. Decades of investigation, clinical practice, differential diagnoses, and materia medica have helped shape my understanding of why people get ill and what plants can help.

At my clinic in Brighton I often hear patients reporting feeling lost, unsure how to proceed. Many of the answers are buried deep. My clients come to me from all walks of life – sometimes I feel as if they are attracted to me the way I am attracted to plants and nature's healing medicine.

I know from my clients that within days of being bitten by a tick, there is a deep feeling of confusion, of being shipwrecked, lost at sea, desperate for a rock to hold on to. Some lucky people have their symptoms recognised by the medical profession, and appropriate treatment is given. Some, however, slip through the net, and, cold, tired, and lonely, they call out for help.

They come to me exhausted, battered by the waves of symptoms, and unhappy with the changing options of help, like tides. Washed up, they hardly recognise themselves, but I recognise their need for a different perspective, a good diet, and herbal medicine.

Together we try to make sense of what has happened, and with the help of plants we find the way forward.

I had a busy client, a doctor, who was referred to me by one of his patients. After consultation, one of my suggestions was to take Japanese

knotweed. It so happened that this very invasive plant had recently been removed from the doctor's garden. However, he subsequently reported seeing the plant flourish – and even waving at him in the wind – from his neighbour's garden! Following our consultation, he told me he felt as if the plant had been trying to persuade him to use it, or at least investigate what medicinal properties it might offer. If you are reading this page, you too have been nudged into learning about plants and the many uses a single plant can hold.

Another client, after the second treatment, said, "Still feel on top of the world – you've done things medical professionals have not managed in eleven years!" My hope is that through reading this book you too will be helped in your encounter with Lyme disease.



What is Lyme disease?

By 2050, 55.7 million people (12% of the population) in the USA and 134.9 million people (17% of the population) in Europe will have been infected with Lyme disease.¹

Borreliosis – widely known as Lyme disease – is a bacterial infection, spread to humans by infected ticks. Ticks are tiny arachnids (the size of a sesame seed when young), found in long grass or woodland areas; they feed on the blood of mammals such as deer, mice, rats, cats, and dogs, as well as humans. Tick bites often go unnoticed, unlike those of their relatives – the scorpion or the tarantula, to which one has an immediate reaction even when just hearing their names.

Experience of a woman bitten by a tick

"Being bitten by a tick, I was confused as to what had just happened, but I could not see anything. It was some time later that I looked again, as my ankle was hurting, and then I saw what looked like a tiny black speck of dirt, suctioned onto my ankle, which I removed incorrectly and with great difficulty. I became unwell approximately 12 hours later and then I developed a perfect circular rash around the puncture wound, with slight bruising and reddening, which appeared to be spreading. I am unsure how many days/weeks later it was when I became very unwell, feverish, aching, and feeling like I was losing consciousness. It was then that I was diagnosed by the GP (Dr I), from my symptoms and the rash.

I panicked when I noticed the rash expanding. I went to a pharmacist, who gave me a steroid cream and said, 'that's a normal reaction to an insect bite'. I phoned NHS III, who urged me to go to A&E immediately to get the head removed. The two doctors (Dr 2, Dr 3) who saw me couldn't tell if I had Lyme disease or cellulitis and told me to 'wait and see'. Finally another doctor (Dr 4) said 'not to mess about as the consequences of Lyme disease were worse than the antibiotics', so I was prescribed doxy[cycline] for three weeks."

Ticks can be very small and their bite is not painful, so you may not realise you have one attached to your skin. However, there is a higher risk of becoming infected if the tick remains attached to your skin for more than 24 hours.

The common cause of Lyme disease in Europe and North America is the *Borrelia burgdorferi* bacterium, which is passed to humans through the bite of a tick. There are several other Borrelia species that cause



the disease, including *B. afzelii* and *B. garinii*. Another species, *B. miyamotoi*, causes a disease similar to Lyme. Even though it is thought that Lyme disease has been around for hundreds of years, it was only in the 1970s, in Lyme, Connecticut, that it was first recognised and named. It was linked to cases of arthritis in adults and children who also had other puzzling symptoms of what came to be known as Lyme disease.

Borrelia is a spirochete bacterium that infects ticks; it has many species, all behaving like parasites, which explains why antiparasitic herbs like black walnut or berberine-containing plants are often used in treatment. The screw-shaped spirochetes begin to break down collagen in the body and attach to the vascular endothelial cell surface, stimulating flagellin (a protein that all bacteria contain), which activates the release of the NF- κ B, a protein that is important for cell survival. This causes an inflammatory and immune response, so herbs like red sage (*Salvia miltiorrhiza*), cordyceps (*Ophiocordyceps sinensis*), and cat's claw (*Uncaria tomentosa*) are often combined, as they are potent NF- κ B inhibitors.

Transmission

- » Every year, over 232,125 new cases of Lyme disease are reported in Europe² – that is, 350 cases per 100,000 people a year. Lyme disease is spreading rapidly throughout Europe and northeast Asia.³
- » As the life cycle of ticks is strongly influenced by temperature, climate change will increase the range of suitable habitats for them to survive in.
- » Estimates of the number of people tested and treated for Lyme disease, based on US insurance claims between 2010 and 2018, are approximately 476,000 a year.⁴

There is a growing incidence of Lyme disease due to the increase in the number of people travelling and to change in habits of the vector – the tick. Lyme disease is a year-round problem, but it is more common during spring and summer, when the ticks are active and feed. When an infected

tick bites, the saliva produces anticoagulant compounds that deactivate the inflammatory response you would normally get with an insect bite. Pain signals and itching of the skin are dampened, allowing the tick to continue to feed. If it remains on the skin for several days it will swell to more than twice its size. Depending on the tick's development and the length of time the tick is left on the skin, its saliva can release a specific protein that can interfere with the immune response as it feeds.



"Initially I thought nothing of the bite that I had in France or the circle that formed around it. It looked a bit odd, unlike any other bite that I'd had, but it didn't itch and wasn't painful so I ignored it and it eventually went away. I had some flu-like symptoms, but nothing severe, so I ignored them as well. It was only a few years later that I saw a picture of an erythema migrans rash and realised that mine had looked exactly the same. By this time I had had a couple of years of bizarre and disabling symptoms, including chronic vertigo/dizziness, extreme fatigue (to the point where I was almost bed-bound for a few months), tingling in my legs, brain fog, confusion, poor memory, skin rashes and migraines. By this point I'd had to take medical retirement from work. Once I saw the picture and found out more about Lyme disease, I set about trying to find a Lyme-literate doctor."

A tick can usually live for 2–3 years and can carry multiple microbes. If the tick acquires a co-infection such as Babesia, a parasite that infects red blood cells in humans, this may have the added benefit for the tick of creating a type of antifreeze compound that stops the tick freezing when the weather gets cold, thus increasing the period over which it is active.

It is estimated that a tick can carry 120 different species of bacteria. If it bites an animal infected with *B. burgdorferi* bacteria, the tick can in turn become infected and can transfer this and other infections (through its "dirty needle") onto humans when it bites them and feeds on their blood.

Once you are infected, the *B. burgdorferi* bacteria move slowly through your skin into your blood and lymphatic system. The latter, which is made up of a series of vessels (channels) and glands (lymph nodes), helps fight infection. Spirochetes move into collagenous tissues; in neuroborreliosis (infection of the nervous system by Borrelia), spirochetes are often present in both the central nervous system and the aqueous humour of the eye within days, which is why infected people often complain of floaters or blurred vision.

"It's like water is trickling down my face, a crawling sensation all the time."

A tool kit to support both practitioners and the lay person in diagnosing, treating, and living with Lyme disease

Using an abundance of well researched and in-depth information, recipes, and methods of monitoring progress, *Lost in Lyme* helps to improve wellbeing for sufferers of Lyme disease. Drawing on their wealth of expert knowledge on herbal medicine and nutrition, authors Julia Behrens and Daphne Lambert provide a comprehensive understanding of the treatment and management of Lyme disease and its co-infections. Patients and practitioners have often found it difficult to obtain reliable and effective information, test results and treatment; *Lost in Lyme* addresses these challenges, cementing itself as the definitive guide on the subject.

"A remarkable book from a very experienced and deeply committed herbal practitioner, *Lost in Lyme* is packed with pragmatic help for those whose health has been changed by Lyme disease. This is such a practical book, so needed, whether for practitioners or patients, and includes a gloriously detailed 'plant profiles' section on beneficial herbal medicines that can be of great value to helping recovery."

Anita Ralph MSc MNIMH MCPP, herbalist and author of Native Healers

"An important book on a subject of growing importance for therapists and the general public. Packed with practical suggestions as well as some great recipes this book provides an in-depth introduction to the disease, as well as to mainstream diagnosis and treatment and the natural approaches."

Martin Powell, biochemist, traditional and Chinese medicine practitioner, and author of *Medicinal Mushrooms*

"Impressive book amazing achievement! As a medical doctor with many years of experience in diagnosing and treating patients with Lyme disease, I am delighted to recommend Julia's valuable insights and contribution to this under-recognised and under-treated condition without a moment's hesitation."

Dr Siegfried Trefzer MD, integrated medicine physician

"Lyme disease may be easy to catch but can be very difficult to diagnose and treat. The book's accessible format is ideal for patients looking for advice, while its in-depth discussion of all aspects of the disease will be appreciated by professionals."

Penelope Ody NIMH, medical herbalist and author

Julia Behrens has practised as a medical herbalist for over twenty years and has gained a specialist and in-depth understanding of the complexities of Lyme disease and its co-infections. This has developed from her multi-systemic approach to medicine and considerable research, which she still continues. Over the last ten years she has attended numerous conferences across Europe concerned with Lyme disease, worked in a Lyme clinic and collaborated with other Lyme professionals across a range of disciplines.

Daphne Lambert has been a chef for over forty years, a nutritionist for more than twenty-five years and an organic gardener and environmentalist for most of her adult life. For over thirty years Daphne was the co-owner and chef of the first certified organic restaurant, winning many awards. Daphne is the founding member of Greencuisine Trust, a charity focusing on the relationships between soil, biodiversity, food, cooking & culture.

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