

**Sample**



# The LDN Book 3

**- Low Dose Naltrexone -**

**The Latest Research on:**

*Viral Infections, Long COVID,  
Mold Toxicity, Longevity,  
Cancer, Depression and more.*

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EDITED BY LINDA ELSEGOOD

### PRAISE FOR THE LDN BOOK 3

“This book is gold! It is a science-based, effective solution to the rampant chronic health problems that plague millions today. It is easy to understand, simple to implement, and most importantly, will be a guiding light for so many who are out of answers and are desperately searching for a path home to health.”

**Dr. Mindy Pelz, DC**

*Bestselling author of The Reset Factor, The Reset Factor Kitchen,  
and The Menopause Reset*

“Building on the valuable information shared in the first two volumes of The LDN Book, book three is an equally important and authoritative treasure trove of documented research furthering our understanding of naltrexone. Essential reading for clinicians and patients alike!”

**Larry Trivieri, Jr.**

*Author and Health Freedom Advocate*

“Praises to Linda Elsegood through the LDN Research Trust for once again compiling such a comprehensive, informative book on LDN and its multitude of uses, filled with so many practical and relevant usages of LDN! I would highly recommend it to all who are interested in the potential of LDN’s efficacy in today’s integrative world. This book contains current clinical research, up-to-date protocols, and appropriate dosing for LDN. I cannot speak more highly of such a pertinent book regarding LDN!”

**Lisa Hunt, DO, DOH**

*Specializing in strengthening the immune system, anti-aging, etc*

“The LDN Book 3 Is an invaluable resource for all clinicians that treat patients suffering from chronic inflammatory conditions. The book offers detailed references, protocols, insight, and information on how to use low dose naltrexone to treat CIRS, latent viral infections, autoimmune conditions, refractive depression, and many other challenging conditions. Like the previous two books, Book 3 is a must-have for any physician.”

**Alina D Garcia MD**

*Specializing in fibromyalgia, chronic fatigue, Lyme and CIRS, etc*

“Rarely does a naturopathic doctor consider any medicine to be a “miracle drug,” but LDN has been a life-altering medicine for my patients. Kudos to Linda Elsegood for once again offering a resource for patients worldwide.”

**Dr. Nancy L. Evans, ND**

*Specializing in HRT and thyroid disorders*

“A wonderful resource to build upon patients’ and clinicians’ knowledge of LDN by addressing current research and new applications of the medication.”

**Dr. Jennifer Rickner, PharmD, RP**

*Compounding Pharmacist and LDN Specialist*

“The LDN Books continue to be a treasure chest of information. We recommend them to our patients and practitioners. Book 3 carries on this tradition of being a timely and valuable resource on the many conditions that benefit from LDN.”

**Steve Hoffart, PharmD**

*Compounding Pharmacist*

“The LDN Book 3 gives valuable insight into the drug of the decade. The immense knowledge within can change and improve the quality of life. For many, it’s a game changer.”

**Nat Jones, R.Ph. FAPC**

*Clinical Compounding Pharmacist*



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To my hero, Dr. Mark Mandel

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## PREFACE

In 2000, at the age of 44, I was diagnosed with relapsing-remitting multiple sclerosis (RRMS). With hindsight, I can see I had been having minor relapses for thirty years after Epstein-Barr virus almost killed me and kept me from school for nearly a year when I was thirteen. In 2003, I was diagnosed with secondary-progressive MS. I was unable to function and had poor quality of life. When my neurologist said he could do nothing more for me, I started researching alternative treatments. That's when I learned about low dose naltrexone (LDN), a safe, non-toxic, and inexpensive drug that helps regulate a dysfunctional immune system. Just three weeks after being prescribed LDN by Dr. Bob Lawrence in Wales, I regained clarity of mind, and slowly my symptoms started to recede.

My success with LDN led me to found the LDN Research Trust, a UK-registered, non-profit charity intended to help and support other people whose lives have been taken away from them. Since 2004, our long-term goal has been for the effects of LDN to be tested in gold-standard clinical trials so that ultimately the drug can be made available worldwide to anyone who might benefit from it. We are assisted in this work by a team of medical advisers, who give their time and expertise freely. The Trust is run by volunteers; we receive no funding and rely on donations to operate. Every contribution, however small, is greatly appreciated, and you can access more information, resources, and educational materials (including conference presentations, podcasts, interviews, and more) on our

website: [www.ldnresearchtrust.org](http://www.ldnresearchtrust.org).

This book provides the latest research on the benefits of LDN for treating many different conditions, along with clinical experiences and up-to-date dosing protocols. There is a wealth of quality information from LDN experts in their fields who have generously shared it with us.

An important caveat to LDN is that it isn't a miracle drug or a cure. However, it has helped me, and millions of others worldwide improve the quality of our lives, which is why it's well worth researching further.

LINDA ELSEGOOD  
FOUNDER, LDN RESEARCH TRUST

## FOREWORD

After almost 44 years in practice, as an emergency room physician and as a precision medicine specialist, as well as an internationally known author and lecturer, if I could select only a few medications that have been able to change the lives of my patients the most, one of them would be low dose naltrexone (LDN).

The body's inflammatory response can be provoked by physical, chemical, and biologic agents, including mechanical trauma, exposure to excessive amounts of sunlight, x-rays and radioactive materials, corrosive chemicals, temperature extremes, or by infectious agents such as bacteria, viruses, and other pathogenic microorganisms. It is all about balance. A small amount of inflammation heals. When you run a temperature after catching a cold or have bronchitis, when you have a cough or other symptoms, all of these are related to the body's inflammatory process setting up a healing response. Excessive inflammation, however, is linked to the development of almost every major illness.

Chronic inflammatory diseases are complex to treat and have an impact on many individuals. In low doses, naltrexone can regulate the immune system by exerting its immunoregulatory activity by binding to opioid receptors in or on immune cells and tumor cells. LDN also operates as a novel anti-inflammatory agent. It binds and blocks toll-like receptors, which release inflammatory cytokines, thereby reducing inflammation.

The following are some examples of diseases related to inflammation for which LDN can effectively be used as an adjunct therapy.

- Allergy
- Alzheimer's disease and other forms of cognitive decline
- Asthma
- Diabetes
- Cancer
- Candida infections
- Canker sores and mouth ulcers
- Cardiovascular disease (heart disease)
- COVID-19
- Depression
- Epilepsy
- Food addictions and eating disorders
- Headaches
- Heartburn
- Hypertension
- Hypoglycemia
- Inflammatory bowel disease
- Kidney disease
- Lyme disease
- Obesity
- Parkinson's disease
- Periodontal disease
- Respiratory diseases
- Rheumatoid arthritis

The great news is that inflammation can be balanced using many modalities from traditional medications, to changing eating habits, to adding nutrients and herbal therapies, along with the newest treatment, low dose naltrexone. LDN is a prescription compounded medication that very effectively reduces inflammation.

Low dose naltrexone has been shown to be one of the keys to the future of medicine for many disease processes that are inflammatory in nature. It is also an efficacious pain control agent.

It is my hope, and the hope of the world-class authors of this book, that you begin your medical journey toward healing by learning more about this wonderful medication.

PAMELA W. SMITH, MD, MPH, MS



# ACKNOWLEDGMENTS

I want to thank all the authors for writing their chapters and sharing their experiences and Michael Metivier and Paula Johnson for their excellent editing. Lastly and not least, thank you for reading it.

# CONTRIBUTORS

## **Angus Dalgleish, FRCP FRCPath FMedSci**

Professor Dalgleish is currently the Professor of Oncology at St. Georges, University of London, and Principal of the Institute for Cancer Vaccines and Immunotherapy (ICVI). He qualified in medicine from University College and Hospital with an intercalated Hons BSc in Anatomy with Professor JZ Young, FRS. He spent a year as a flying doctor in Mt. Isa, Australia, before joining the physician training program in Brisbane and then moving to Sydney to specialize in oncology. He returned to the UK to study viruses and cancer with Professor Robin Weiss FRS at the ICR. His research focused on the HIV receptor, pathogenesis, and an effective vaccine candidate in collaboration with Bionor (Norway). Whilst working as an MRC senior clinical research fellow he discovered that Thalidomide had major effects on the immune response which may be useful in HIV and cancer. This led to a long-term collaboration with Celgene, resulting in the discovery of Lenalidomide and Pomalidomide, now licensed for myeloma and lymphoma worldwide. For over twenty years he has researched cancer vaccines and immunotherapy for cancer and noted that *Mycobacterium vaccae* developed for TB corrected the immune deficiency seen in cancer patients. A subsequent development, now known as IMM-101, has shown activity in melanoma and pancreatic cancer and is in trials for these conditions as well as COVID. As a result of these studies, it became clear that good vitamin D3 levels were vital for a clinical response and that several other agents have significant benefit in cancer patients, including LDN.

**Deanna Windham, DO**

Dr. Windham is a proponent of the innate healing capacity of the human body. We don't heal with traditional approaches, she believes, because they focus solely on disease treatment and symptoms, while ignoring underlying factors that cause disease states to begin with. Another limiting factor to healing is breaking the body apart into isolated systems that ignore how the body works together for health or illness and must be treated as a whole. When all such factors are discovered and treated, healing is a natural state of human being.

Dr. Windham specializes in immune and autoimmune disorders, but treats all concerns with a holistic, integrative approach. She has utilized and is familiar with dozens of treatment modalities that she uses to treat each person individually. Throughout twenty years of practicing medicine, she has earned a reputation among patients and practitioners alike as being compassionate and caring and is sometimes called the Sherlock Holmes of medicine for her thoroughness and ability to investigate and find treatment options for even the most difficult cases.

**Elizabeth Livengood, NMD**

Dr. Livengood received her Doctorate of Naturopathic Medicine from Southwest College of Naturopathic Medicine and a master's in education from the University of Phoenix. She completed an integrative adult medicine residency where she learned about Low Dose Naltrexone and began teaching at the medical college. Dr. Livengood has also taught science, health, and yoga since 2002.

As a doctor, she has enjoyed work in community clinics, in private practice, and in various teaching capacities. She enjoys educating her patients, lecturing at conferences, and leading yoga classes, workshops, and teacher trainings. Her area of expertise is treating autoimmunity by integrating conventional and natural therapies, which range from cutting edge hair and collagen restoration to foundational nutrition and lifestyle therapies.

Dr. Livengood is a medical advisor for the LDN Research Trust, and an active member in her state association (AzNMA). She contributes regularly to professional publications and has two major

writing projects in the works. Recently, she joined two podcasts focusing on a holistic approach to health from a mind/body/spirit perspective.

### **Yoon Hang “John” Kim, MD**

Dr. Kim has been practicing integrative medicine and acupuncture since 1999. As a residential fellow at the University of Arizona, he trained with Dr. Andrew Weil, a world-renowned leader in the field of integrative medicine. He wrote about his decade of work as the director of an integrative medicine practice in the book *Tao of Healing: A Story of Georgia Integrative Medicine*. As an integrative health consultant to hospitals, academic institutions, and clinicians, Dr. Kim has helped to establish integrative medicine practices in many settings.

He is the founder of the Integrative Health Studies Certificate Program at the University of West Georgia, where he has also served as a member of the faculty. He is the author of two books and more than twenty articles on integrative medicine.

During his studies at the Medical College of Wisconsin, Dr. Kim was named a Howard Hughes Medical Research Fellow. After graduating, he undertook a residency in the Preventive Medicine Residency Program at the University of California, San Diego. Dr. Kim completed the UCLA Medical Acupuncture Training Program for Physicians, and holds a master’s degree in Public Health (MPH) from San Diego State University.

### **Kent Holtorf, MD**

Dr. Holtorf is the medical director of the Holtorf Medical Group, founder and medical director of the non-profit National Academy of Hypothyroidism, and founder of Integrative Peptides, which is dedicated to training physicians about groundbreaking peptide therapies and bringing doctors and patients the highest quality natural bioidentical peptides as supplements with unique delivery systems.

Dr. Holtorf is an internationally known lecturer, author, and innovator in cutting-edge research and treatments. He has

personally trained numerous physicians across the country in the use of bioidentical hormones, thyroid replacement for complex hypothyroidism syndromes, peptide therapies, immune-modulatory strategies, stem cell, exosome and growth factor treatment, hormone replacement for complex endocrine dysfunction, and innovative treatments of chronic fatigue syndrome, fibromyalgia, Lyme disease, and other chronic infectious diseases, CIRS, neurodegenerative diseases, and many others.

He is a fellowship lecturer for A4M. He was the Endocrinology Expert for AOL Health and is a guest editor and peer-reviewer for the medical journals *Endocrine*, *Postgraduate Medicine*, and *Pharmacy Practice*. Dr. Holtorf has published many peer-reviewed endocrine reviews on complex, multisystem, poorly understood conditions. He has demonstrated that much of the long-held dogma in endocrinology and infectious disease is inaccurate.

He has been a featured guest on CNBC, ABC News, CNN, Fox News (debating the Fox news medical A-team), Good Morning America, The Today Show, EXTRA TV, Discovery Health, The Learning Channel, Glenn Beck, Nancy Grace, Sean Hannity, and more and quoted in numerous print media including the *Wall Street Journal*, *Los Angeles Times*, *US News and World Report*, *San Francisco Chronicle*, WebMD, *Forbes*, among many others.

## **Nasha Winters, ND, FABNO**

Dr. Winters is a global healthcare authority and best-selling author in integrative cancer care and research consulting with physicians around the world. She has educated hundreds of professionals in the clinical use of mistletoe and has created robust educational programs for both healthcare institutions and the public on incorporating vetted integrative therapies in cancer care to enhance outcomes. Dr. Winters is currently focused on opening The Metabolic Terrain Institute of Health, a comprehensive metabolic oncology hospital and research institute in the United States where the best that standard of care has to offer and the most advanced integrative therapies will be offered. This facility will be in a residential setting on a gorgeous campus against a backdrop of regenerative farming, EMF mitigation and

retreat, as well as state-of-the-art medical technology and data collection and evaluation to improve patient outcomes.

### **Pamela Wartian Smith, M.D., MPH, MS**

Dr. Smith spent her first twenty years of practice as an emergency room physician with the Detroit Medical Center and then 28 years as an Anti-Aging/Functional Medicine specialist. She is a diplomat of the Board of the American Academy of Anti-Aging Physicians and is an internationally known speaker and author on the subject of Precision Medicine.

She also holds a master's in public health Degree along with a master's degree in metabolic and nutritional medicine. Dr. Smith is in private practice and is the senior partner for the Center for Precision Medicine with offices in Michigan and Florida. She has been featured on CNN, PBS, and many other television networks, has been interviewed in numerous consumer magazines, and has hosted two of her own radio shows.

Dr. Smith was one of the featured physicians on the PBS series "The Embrace of Aging" as well as the on-line medical series "Awakening from Alzheimer's" and "Regain Your Brain." Dr. Pamela Smith is the founder of the Fellowship in Anti-Aging, Regenerative, and Functional Medicine and is the past co-director of the master's program in metabolic and nutritional medicine at the Morsani College of Medicine, University of South Florida. She is the author of eleven best-selling books. Her book *What You Must Know About Vitamins, Minerals, Herbs, and So Much More* was published in 2019. Her newest book, *Max Your Immunity*, was published in 2021. Her new PBS/CNN special will air in fall 2022.

### **Sarah J. Zielsdorf MD, MS**

Dr. Zielsdorf is the owner and medical director of Motivated Medicine, an innovative consultative medical practice in West Chicago, Illinois. She received a BA in microbiology from Miami University, an MS in public health, microbiology, and emerging infectious diseases from the George Washington University, and earned her MD at Loyola University Chicago Stritch School of Medicine. She completed her residency at Loyola University

Medical Center and the Edward Hines Jr. VA Hospital, is an Institute for Functional Medicine Certified Practitioner and board-certified in Internal Medicine.

The Motivated Medicine approach Dr. Z developed is rooted in Translational Medicine, which bridges the gap between current worldwide research and direct clinician care. Dr. Zielsdorf's open-minded approach to treatment is informed by data, advanced diagnostic testing, whole-body wellness, tried-and-true "conventional" medicine, and so much more. As an autoimmune thyroid patient herself, she understands that every individual is biochemically and genetically unique.

Dr. Zielsdorf is an author featured in *The LDN Book, Volume 2* and appeared in Dr. Izabella Wentz's documentary, *The Thyroid Secret*. She lectures nationally at universities and conferences on the subjects of the thyroid, microbiome, autoimmunity, and LDN. Dr. Zielsdorf serves as the education director and a medical and research advisor to the LDN Research Trust and has been a speaker at the International Low Dose Naltrexone Conferences since 2017.

### **Sebastian Denison, RPh, FAAR**

Sebastian Denison received his BS in pharmacy at the University of British Columbia. He worked at Northmount Pharmacy in North Vancouver for eleven years, specializing in HRT, veterinary, pain, and sports compounding. He also was the manager of Pharmacy Operations with the 2010 Vancouver Winter Olympic/Paralympic Games, and then the manager of the Whistler Olympic Village Polyclinic Pharmacy. In addition to his role as a PCCA clinical compounding pharmacist, Sebastian works with both the U.S. and Canadian CORE compounding training education teams and the pharmacy student education team. Sebastian also speaks at physician, pharmacist, and other health care professional education symposiums and events. He has recently lectured for the American Academy of Anti-Aging Medicine on nutrition and pain, pharmacy compounding and collaborative practice, and alternative uses for Naltrexone. Sebastian is currently completing the Metabolic Medical Institute's Fellowship in metabolic and nutritional medicine.

**J. Stephen Dickson BSC (hons) MRPharmS**

Stephen Dickson has been working with LDN for over a decade in the United Kingdom. Working together with pharma partners in the industry to stabilize the supply chain and standardize methods of obtaining prescriptions in a safe and compliant manner. As well as running the well-established private medical department of Dickson Chemist, he also runs seven NHS pharmacies in Glasgow.

Stephen also works in several other businesses, owning a technology company responsible for dispensing the majority of the methadone in the UK in community pharmacy (MethaMeasure), and one of the largest online controlled drugs systems in the UK (CDRx). Stephen also is an advisor to Canidol pharmaceuticals, a company dedicated to furthering the cause for medical cannabis in the UK and helped design the UK Cannabis Clinic Model for use in community pharmacy and primary care.

In his spare time, Stephen plays guitar in several bands (including a Ceilidh band), is on the board of directors of a semi-professional theatre group (where he generally functions as the costume guru), oversees their MethaMeasure North American operation and is a frequent speaker at the LDN conferences internationally.

**Wai Liu, PhD**

Dr. Wai Liu received his PhD in medical oncology from St. Bartholomew's Hospital, University of London in 2001. During this time, he developed models to assess the effect of combining chemotherapies with other treatment modalities as a way to enhance activity. Dr. Liu has worked in a cancer research environment for over twenty years. He is a prominent scientist in the field of cannabinoid research, an area he has actively engaged for over fifteen years. His team was the first to demonstrate a benefit in combining cannabinoids and irradiation in models of brain cancer. Other interests of Dr. Liu have been to develop new combination strategies that utilize repurposed agents. These have included naltrexone, artemisinins, and the IMiDs. He has also investigated ways of enhancing anticancer activity by modifying the pathological associations between immune and tumor cells by using immune-targeting drugs. He has



over 60 publications in the field on cancer research, and worked in collaborations with pharma including GW Pharma, Celgene, AstraZeneca, and Novartis to develop new agents and to perform pre-clinical work. A number of these have continued successfully into Phase I and II trials. He is a Key Opinion leader on the use of cannabinoids as a cancer treatment, and he is regularly contacted by the media for his opinions on this fast-moving area.

### **Yusuf M. (JP) Saleeby, MD**

Dr. Saleeby is a functional & integrative physician with offices in South Carolina. He is a graduate of the Medical College of Georgia and finished post-graduate training at East Carolina University School of Medicine. His first career was in emergency medicine and for his journey into integrative, holistic and functional medicine he embarked on a self-designed curriculum including memberships in A4M, ACAM, and AAMG.

He has been published in medical and fitness trade journals and has contributed chapters in a couple of books on preventive medicine and thyroid disorders. He also published a book on adaptogen herbs in 2006. Dr. Saleeby is a noted regional speaker on topics of functional medicine, autoimmune diseases and tick-borne illness. He is a medical advisor board member to the LDN Research Trust. Dr. Saleeby is a member of ILADS, AARM and IFM to name a few.

In 2018 Dr. Saleeby founded and is current director for the non-profit Priority Health Academy. The Academy's main goal is to educate advanced providers in functional medicine as well as host an annual symposium (in its fourth year as of July 2021). The academy also offers sub-internships to PAs and NPs. Dr. Saleeby has been at the forefront of telemedicine offering this type of virtual service since 2013. Dr. Saleeby and his team of highly trained advanced practitioners are available at the Carolina Holistic Medicine centers in Murrells Inlet, SC and Charleston, SC.

## ABOUT THE EDITOR



Photo by Julia Holland

Linda Elsegood is the founder of the UK charity LDN Research Trust, established in 2004. She has Multiple Sclerosis (MS), and Low Dose Naltrexone (LDN) significantly impacted her life. She wanted to help other people, not only with MS but all autoimmune diseases, cancers, mental health issues, etc. In the last 18 years, the charity has helped over a million people worldwide.