

How I Discovered the Power of Hormones

In 2004, after being a general practice physician for 20 years, I came across new ideas in endocrinology. I decided to provide only hormone replacement, using the proper natural molecules. I named my practice “Hormone Restoration”. Instead of just assuring that patients had within-range laboratory test results, I listened to their complaints. When their signs and symptoms were consistent with a hormone deficiency and there was no other apparent medical cause, I offered them a trial of effective hormone optimization to see if it would help. The results were usually dramatic, far more impressive than conventional drug treatments. Patients told me that various nagging problems and even ongoing medical and psychiatric disorders had improved or disappeared. I usually had to replace several hormones in order to restore youthful balance among the hormones and achieve the best clinical effects. I made certain that they had Vitamin D and iron sufficiency also. I told them to take a simple cocktail of nutritional supplements to assure that they had no deficiencies. With experience and study I gradually became a very different kind of physician. Instead of looking to prescribe a drug for every problem, I thought about and studied human physiology and endocrinology. I considered the possible causes of the patient’s symptoms and looked for any correctible hormonal or nutritional causes. I came to understand that the major hormones, those secreted by large glands—T3 (thyroid hormone), cortisol, dehydroepiandrosterone (DHEA), aldosterone, estradiol, progesterone, testosterone and growth hormone—have much greater roles human health, function, and quality of life than currently understood. Hormones are not dangerous drugs; they are not drugs and they are essential to life. I realized that current endocrine beliefs and practices are wrong; based upon assumptions that date back to the mid-20th century. In order to help patients I had to break all the rules of conventional endocrinology as codified in the guidelines from professional endocrine associations and in conventional textbooks. I discovered what should be the foundation of all effective medical practice.

Why did I learn to view endocrinology so differently from the mainstream endocrinologists? How could they all be wrong and I be right? It has to do with the difference between simply accepting what one is taught as true, versus questioning all accepted ideas and using one’s mind to grasp the truth. I was always curious about this world: I wanted to understand everything about it and about human beings. Schooling suppressed but did not destroy my curiosity. Under other circumstances I would have studied philosophy, psychology, or physics. However, my mother was a devout Christian and wanted me to be a minister or missionary. I did not want to disappoint her. Since I excelled at math and the sciences, I came up with a compromise; I would, like Jesus, heal the sick. I attended Jefferson Medical College in Philadelphia, Pennsylvania. Upon graduating in 1984 I entered a residency in psychiatry, hoping to learn all about the brain and mind—about human psychology and behavior. I found, however,

that the profession was embracing “biological psychiatry”. It is based upon the assumption that all psychological/psychiatric disorders are caused by genetic or acquired disorders of brain chemistry, and these are corrected by psychotropic drugs. Psychiatry was becoming what it is today: a diagnose-and-drug scheme. A set of symptoms is given a label and the label is assumed to be a biochemical disease. The label is then assumed to be the cause of the symptoms. The physician is trapped in a word game: The patient is depressed because they suffer from depression. It’s a simple intellectual error. I looked at the evidence at the time and decided that there was no support for the theories of neuro-biochemical causation. Indeed, the genetic or acquired neurotransmitter abnormalities supposed to cause depression, schizophrenia, anxiety, bipolar disorder, attention-deficit disorder, etc. have still not been found. These are just labels that trigger the prescription of certain drugs. Psychotropic drugs do not correct the cause. They instead alter brain function in ways that reduce some symptoms. Unfortunately, as drugs, they do cause other symptoms and problems.¹ Realizing that the biological psychiatry was false, I theorized that almost all psychiatric disorders were psychological/experiential in origin—software, not hardware problems. Ironically, 40 years later, I now believe that many psychiatric problems do have a biochemical basis in part—hormone and nutrient deficiencies. The brain needs sufficient levels/effects of all hormones and nutrients. Hormone deficiencies cause malfunction of the brain as well as the body. Any impairment of brain function will create or worsen mental and emotional problems. In fact, the research shows that many psychotropic medications and drugs of abuse actually do work, in part, by increasing cortisol levels and effects or by improving thyroid effect in the brain. Psychotropic drugs also work by partially compensating for endocrine deficiencies.

Psychiatry was my first encounter with influence of the pharmaceutical industry in medicine. At the time, I still believed that the rest of medicine was good science, so I decided to drop out of my psychiatry residency and become a “real” doctor, a general practitioner. I would use all the knowledge that I had obtained in medical school and internship to help people. I would use my spare time to pursue my intellectual curiosity about the brain, psychology and society. However, I soon realized that I did not like general practice, so I sought out positions that were not too demanding and that left me with more free time to pursue my intellectual interests. While I was in medical school I combed through new and used bookstores. I found Ayn Rand’s book “Philosophy Who Needs It”. She introduced me to the power of philosophical cognition—of assuring that our word formulas correctly describe the world and its causal processes. I realized that in spite of being a top student, I did not understand how the world works. I was ignorant. I began looking for any authors who had something to teach me. When I could no longer find better ideas anywhere, I started figuring things out for myself. I began by writing an outline of the evolution of the Cosmos and its various levels of complexity. When I looked to theoretical physics to understand what the Cosmos was made of at the most fundamental level, what substance(s) and processes gave rise to everything. I quickly realized that Relativity and Quantum Mechanics were nothing more than observer-based measurement and prediction models. They are not physical theories: they do not attempt to explain what the Cosmos is made of or what causes the phenomena that the

¹ Breggin P. Toxic Psychiatry: Why therapy, empathy, and love must replace the drugs, electroshock, and biochemical theories of the “new psychiatry”, St Martin’s Press, 1991. [Author’s website](#)

observer experiences and measures. They were, in fact, the product of religious inhibitions against replacing the God-theory with Cosmic theory. Their purpose was to prevent us from understanding the Cosmos and thereby understanding ourselves. I published several papers on this subject between 2001 and 2015.^{2,3,4,5} Through my research I also discovered that all our social sciences—psychology, economics, political science, education, etc.—were also based upon old false and/or inadequate assumptions. I realized that all of our society’s intractable problems are due to our failure to think—to question the ideas, the beliefs that we have inherited from our species’ more ignorant past. In fact, what we call “Science” is actually anti-philosophy. Science just counts, measures and correlates the data. It prevents us from questioning foundational assumptions. Philosophy is what we think and hope Science is—the unrestricted search for knowledge and understanding. Why am I discussing all this? My intellectual journey explains why I was able to question endocrine doctrines, the opinions of the experts, when I decided to start helping people with hormone replacement. What I had found in physics and the social sciences was no less true of medicine. Doctors are also often trapped in false and inadequate ideas. This is why well-meaning physicians continue to adhere to endocrine practices that make no sense and do not work to help patients. They are stuck in the paradigm that they inherited and they are incapable of questioning that paradigm or replacing it with a new one. As long as no one chooses to think, old inadequate ideas are passed on from teachers to students for generations.

I too had failed to question what I was taught in my own profession. Even after 20 years in general practice I had not turned my intellectual curiosity towards medicine itself. Why? Like all doctors, I had to function in the clinic every day. I had to have a practice plan that I believed in. Unless I were going to recreate medical practice from scratch, I had to assume that the experts knew what they were doing. However, I did begin to realize that scientific studies showed that many of the drugs that I was taught to prescribe were actually beneficial. They either brought no benefits at all, or helped so little that it was impossible to justify their use given the problems that they caused. Based upon the evidence, I stopped prescribing antibiotics for viral illnesses—the colds and flu that bring so many people to doctors’ offices. This made my life more difficult as I had to re-educate every patient who had been trained, by physicians, to seek antibiotics for such illnesses. I also realized that there was little evidence to support giving cholesterol-lowering drugs to every adult whose numbers were “high”—above some arbitrary cut-off determined by a committee of industry-funded physicians. I also realized that the solution to blood sugar and blood pressure problems was not medications but radical changes in diet and lifestyle. I decided that I didn’t want to spend the rest of my life handing out anti-cholesterol, anti-diabetic, and anti-hypertensive drugs to every adult; nor did I want to become a life-coach—trying to get patients to radically change their diets and lifestyles. Therefore I started to retreat from medical practice. I took positions in overseas locations where the pace was slower, so I had more time to pursue my intellectual interests. An unintended consequence of this decision was that I was able to spend unhurried time with patients. I could get their entire history, listen to all their symptoms, examine them thoroughly and

² Lindner HH, Beyond Consciousness and Cosmos; Beyond Relativity and Quantum Theory to Cosmic Theory, Physics Essays, vol. 15, 113-128, 2001. [Article](#)

³ Lindner HH. A QED-compatible Wave Theory of Light, Electrons, and their Interactions, The Nature of Light: What are Photons IV, Proceedings of SPIE, vol. 8121, p. 81210X-1, 2011. [Article](#)

⁴ Lindner HH. Beyond Newton and Einstein to Flowing Space, Physics Essays, vol. 25, p. 500, 2012. [Article](#)

⁵ Lindner HH. On the Philosophical Inadequacy of Modern Physics and the Need for a Theory of Space, Cosmos and History: The Journal of Natural and Social Philosophy, vol. 11, p. 136, 2015. [Article](#)

consult references as needed.⁶ I learned to practice a higher quality of medicine than doctors can ever do when they remain on the clinic treadmill—with only 10 or 15 minutes scheduled per patient all day, every day. In such circumstances, their primary interest is to get the patient out the door so that they can see the next patient and get home on time.

Looking back, I now realize that what I didn't like about general practice was what I had not liked about psychiatry—it too was just so many pharmaceutical diagnosis-and-drug schemes. Pharmaceutical corporations, with their billions of dollars, want physicians to view every symptom or disorder as an indication for a drug. A drug is a molecule that does not belong in the body, does not correct the cause, and has deleterious effects. Doctors are trained to be drug pushers. This approach to medical practice is inherently unsatisfying for the physician as it does not find or correct the cause. At the time, however, I thought that the problem was me—that I just didn't like being a doctor. I quit working as a physician twice, for 2 years each time, but finances forced me to return to work. In 2004, when back in the US, I tried occupational medicine but had serious conflicts with both the science and ethics of that field. I heard that a local chiropractor was seeking a physician partner and decided to see what alternative medicine had to offer. During our initial interview she handed me a syllabus from a [course on bioidentical hormone replacement](#) that she had taken with [Dr. Neal Rouzier](#), an emergency medicine physician in Los Angeles. I read through the course syllabus which included many abstracts and articles from medical journals. I realized immediately that hormones were not dangerous drugs, as I had been led to believe, but were safe and beneficial components of our complex physiology. Unlike drugs, hormones have only the intended effects in the body; they have no side effects. It made sense to me that our bodies needed optimal hormone levels, not just levels within some broad population range. It also made sense to me that the loss of hormones with aging was deleterious, not beneficial. I had studied evolutionary biology and knew that aging is pre-programmed dying, part of Nature's plan to remove us from the gene pool. Within a few days I knew that I had found my niche in medicine—I would restore hormones. I would no longer prescribe drugs. I assumed that this would be easy work; little did I know at the time just how revolutionary this idea was or where it would lead.

I was a well-read physician. I knew the conventional endocrine practice guidelines very well. I knew that hormone replacement was controversial, even strongly discouraged when the levels were “normal” for age and sex. I knew the concerns that physicians had about the “risks” of hormone replacement. In 2002, the Women's Health Initiative study had found that “hormone replacement therapy” for menopause was dangerous. This cast a shadow on all hormones and their replacement. Before I could break the rules of my profession I had to review the evidence. I had to be certain that hormone restoration and optimization could be done in way that was both beneficial and safe. For the first time, I brought to bear upon medicine the philosophical skills that I had honed in my study of theoretical physics and other subjects. I started by gathering ideas from the experts in this new field of hormone replacement. I attended all of Dr. Rouzier's hormone replacement seminars and also conferences run by

⁶ I was often able to diagnose long-standing problems that other doctors had missed. I was struck by how different this was than the usual high-volume clinic practice. It was more like being a scientist. I kept a large number of medical textbooks in my office and consulted them frequently, often when the patient was present. Some patients didn't appreciate my research on their behalf. They commented to others, “That doctor doesn't know much, he has to look things up in books!”

the [Professional Compounding Centers of America](#) and the [American Academy of Anti-Aging Medicine](#). I read many books about these new ideas, and I also read conventional endocrinology textbooks. I spent many hundreds of hours reviewing the scientific literature using [PubMed](#). I read hundreds of journal articles with care, following up on any references that appeared interesting. I kept [files of all the relevant abstracts](#). I found that, indeed, the bulk of the evidence supported the reasonable proposition that youthful hormone levels and balance were more beneficial for all aspects of our health and well-being. Many of the disorders and diseases that we develop as we age are due, at least in part, to age-related hormone losses and imbalances. For those who needed it, hormone replacement to optimize levels and effects was not dangerous, but inherently safe when done right. The problems that had occurred with conventional “hormone replacement” were understandable and avoidable; caused by doctors using the wrong molecules, the wrong route of delivery, or by creating an imbalance among the various hormones. I realized that the evidence did not support the professional endocrine associations’ restrictive guidelines for the diagnosis and treatment of hormone deficiencies—whether due to aging or other causes.

So in 2005, at the age of 46, I started a solo medical practice dedicated solely to improving people’s quality of life and health through hormone replacement. I thought that I should try it out on myself first—to see the effects and to “risk” my own health before that of others. At the time I thought that I was perfectly healthy, but just getting old. I was feeling tired. I couldn’t finish a long drive without wanting to take a nap. I couldn’t gain muscle strength or size with weight lifting as I had before. I looked thin, even gaunt. I ran blood tests on myself and found that my thyroid, testosterone and DHEAS levels were “normal”, but were near the bottom of the laboratory’s ranges. I knew that this was not optimal. Following Dr. Rouzier’s protocols, I began hormone replacement with [Armour® Thyroid](#), a compounded testosterone cream and sublingual DHEA. I experienced remarkable improvements. I began to feel more alive, like I had felt in my youth. Familiar feelings returned; this was no drug effect. My mental function improved—I had not been aware that it had declined. I began to experience and remember dreams again—I had not realized that I had stopped dreaming, or recalling dreams. I began to hear songs in my mind during the day again—I had forgotten that was a regular feature of my younger years. I began to have spontaneous penile erections during the night and upon awakening—I had not noticed that they had disappeared. My libido increased. I was able to gain muscle mass and strength with weightlifting for the first time in 10 years. I felt and functioned as if I were 10 or even 20 years younger. Given what I experienced with hormone optimization, and knowing it was both safe and beneficial for long-term health, it was now not just my choice but my ethical responsibility to help others.

I named my practice “Hormone Restoration” to make it clear that I was not practicing general or conventional medicine; I was only replacing hormones. In order to further isolate my practice from the conventional medical and legal systems, I had patients sign detailed contract and consent forms. (See Appendix C.) I also had to isolate myself from the medical insurance system. I had patients pay me directly for my services. I did not charge high initial and maintenance fees like anti-aging clinics do. I charged patients only for my time, by the minute, like a lawyer. Patients were thus able to try hormone

restoration without a large up-front cost. Unlike many other non-conventional providers, I did not sell any products or profit from what I prescribed. To help patients afford hormone restoration, I worked within their medical insurance system for their tests and prescriptions, as much as possible. I diagnosed them as having endocrine, Vitamin D or iron deficiencies according to my clinical judgment, not according to the guidelines. Most physicians do not realize that they have this right—as independent professionals. With the proper diagnoses, medical insurances covered my patients' tests and some of their prescriptions. I kept my overhead costs low, with just one small office and one employee who managed the practice remotely, from her home. I tried to make hormone replacement affordable for everyone so that I could not only help more people but also quickly gain a great deal of experience.

My approach was simple: If the person who consulted me had symptoms consistent with a hormone deficiency and relatively low hormone levels compared to the rest of the population and/or compared to youthful-optimal levels, I would offer him/her a trial of hormone optimization. Based on the trial, we decided together whether the hormonal therapy sufficiently improved his/her quality of life and ability to function. A positive response to hormone replacement supported the diagnosis of a deficiency. I followed Dr. Rouzier's protocols age-related hormone losses. I prescribed estradiol, progesterone and testosterone to women in menopause and testosterone to men, mostly by the transdermal route—skin creams or sublingual tablets. I adjusted the doses by blood testing and by clinical effect—attempting to eliminate all signs and symptoms of hormone deficiency without producing any signs or symptoms of hormone excess. I prescribed DHEA to both sexes to correct its age-related decline. Following Dr. Rouzier, I also diagnosed relative thyroid deficiencies based upon symptoms and the actual thyroid hormone levels: free T4 and free T3. Instead of prescribing T4 (levothyroxine), I prescribed the more potent Armour Thyroid®. Based upon my research, I also diagnosed and treated the common Vitamin D and iron deficiencies. I advised every patient to take a multivitamin, Vitamin C, and fish oil. I limited my practice and by expertise to these hormones and nutrients.

Because I did not prescribe drugs, but only natural hormones and nutrients, I started to become a very different kind of physician. Rather than handing out diagnostic labels like “depression”, “chronic fatigue”, “fibromyalgia”, “insomnia”, “headache”, “irritable bowel syndrome”, “asthma”, etc., I thought about possible causes—about human physiology. Most patients had seen their primary care doctor about their complaints; many had also seen one or more specialists. Some had seen or were under the care of endocrinologists. These doctors had done the usual medical tests and had ruled out the usual diseases. They had provided the usual treatments. I pondered what endocrine or nutrient deficiency could be causing their problems. I ordered the most sensitive endocrine tests available. If the symptoms and test results suggested that a hormone deficiency may be responsible, I gave the patient a trial of hormone optimization. I adjusted dose by symptoms primarily, and blood tests secondarily. Since I was prescribing only natural molecules and not drugs, the patients' responses were physiological. They indicated something about the person's physiology. Therefore I had to learn more about physiology and especially the effects of hormones on all aspects of our physiology. I realized that these hormones did not have the narrow range of effects ascribed to them, but instead had powerful beneficial effects in

every cell, tissue and organ in the body. The “sex hormones” were not just about sex—they affected all aspects of health and well-being including mental function, muscle function, sleep and mood. I became increasingly aware that many of the symptoms and health problems that doctors routinely treat with drugs were due, in part or in whole, to hormone and nutrient deficiencies.

I saw profound improvements in my patients—unlike anything I had seen while practicing conventional medicine. The vast majority felt much better; they even looked healthier and happier. In addition to relief from typical hormone deficiency symptoms, many told me that physical and mental problems that had nagged them for years had disappeared. Patients often said that they felt like themselves again. Many told me that they felt 10 or 20 years younger. Some said that they had never felt so good in their entire life. It was clear that they had been suffering from hormone and nutrient deficiencies and that restoring these vital molecules had improved their general physiology and brain function. Logically, such marked improvements in their physiology implied that their long-term health would be better also. I was just beginning and still had a lot to learn, but I knew that I was on the right path.

I helped most patients so much that they told many others about their experience, and my practice grew quickly. I was consulted by many suffering persons who had received no help from conventional medicine. Most of them were women, for reasons I will discuss later. Some were in menopause and simply needed estradiol, progesterone and testosterone. Others had sufficient sex hormone levels but had serious problems like fatigue, depression, muscle or joint aches, weight gain, anxiety, memory-concentration problems, and insomnia. I believed their reports of their symptoms. I accepted the fact that something must be wrong with their physiology. I refused to give them diagnostic labels or drugs. As no other cause had been found, I tried to help them with hormone and nutrient supplementation where indicated—even when their test results were “normal” (within the laboratory’s reference range).

My practice may have remained relatively easy, but far less effective, had Dr. Rouzier not taught me to pay attention to the symptoms of hypothyroidism and to prescribe natural desiccated thyroid (NDT) instead of levothyroxine. Unlike sex hormone replacement, thyroid optimization is a major medical intervention. NDT products like Armour and [Nature-Throid](#)[®] contain both T4 (levothyroxine), the inactive prohormone, and T3 (liothyronine), the active thyroid hormone. When patients complained of fatigue, inability to lose weight, achiness, dry skin, cold intolerance or cognitive dysfunction I looked closely at their free T4 (FT4) and free T3 (FT3) levels. I found that most of them had a normal thyroid stimulating hormone (TSH) levels, but “low-normal” FT4 and/or FT3 levels. Most responded remarkably well to a trial of NDT. Their energy and mood improved. Their aches disappeared. Their dry skin, constipation and cold extremities improved. They were able to lose weight with effort. They could think and concentrate better. Their faces looked thinner, making them appear younger. Some changed so much that I could not recognize them when they returned for follow-up. I saw the same improvements in persons that I treated with NDT who had been receiving conventional TSH-normalizing levothyroxine (e.g. Synthroid[®], Levoxy[®]) therapy. I found that when I had adjusted the NDT dose by symptoms and FT4/FT3 levels, the TSH was usually low or completely suppressed. Their FT4 and FT3 levels were within-

ranges before their daily AM dose, proving that they were not hyperthyroid. This fact contradicts the conventional belief a low TSH on thyroid replacement therapy equals thyrotoxicosis and all its attendant health problems. I realized that the conventional reliance on the TSH test for diagnosis and treatment was illogical, not to mention unsupported by the evidence. By relying on the wrong test, endocrinologists had been rendered incapable of diagnosing and effectively treating hypothyroidism. Eventually, I also began to realize that some patients had hypothyroid symptoms that did not resolve with NDT therapy, even though they have relatively high FT4/FT3 levels. They had some form of thyroid resistance. I eventually learned how to help them with more T3, or with T3-only.

Because I was actually trying to optimize thyroid levels and effects, I began to learn much more about the endocrine system and its role in human health and function than any TSH-normalizing endocrinologist ever could. Most persons with fatigue, muscle and joint aches, cognitive dysfunction, depression, poor stamina and low-in-range FT4/FT3 levels responded well to NDT. Some, however, had no improvement at all or even felt worse. Some initially felt better on NDT, then felt worse. These patients were, again, mostly women. Some of them also felt worse when I tried to correct their estradiol or DHEA deficiencies. I understood that these negative reactions to physiological doses/levels of natural hormones were not “side effects”. These patients had to have some other endocrine or metabolic disorder/deficiency that was being worsened by hormone replacement. The cause was not hard to find. All physicians are taught that thyroid replacement can worsen adrenal insufficiency; but they think that adrenal insufficiency is extremely rare—confined to persons with obvious disease or damage affecting their adrenal glands (Addison’s Disease) or their hypothalamic-pituitary system (central adrenal insufficiency). They think that adrenal insufficiency is always severe, even life-threatening. They cannot imagine that any apparently healthy patient in their office could have adrenal insufficiency. “Adrenal insufficiency” is actually an archaic term; what these patients suffered from, and what thyroid replacement worsens, is cortisol deficiency (hypocortisolism).

Dr. Rouzier did not deal with hypocortisolism in his first course, but from the PCCA conference and alternative medicine sources I had learned about “adrenal fatigue” and saliva cortisol testing. Saliva testing has been shown to be an accurate test of a person’s free cortisol levels. Since samples can be provided at home, under normal circumstances, saliva testing also provides the best assessment of the person’s free cortisol levels under normal circumstances. As I became aware of the many manifestations of hypocortisolism, I began to see it in more patients, again mostly women. They usually had relatively low cortisol and/or DHEAS levels on testing—a partial cortisol and/or DHEA deficiency. Some, however, had unusually high DHEAS levels. Their symptoms were typical of hypocortisolism and had no other apparent cause. They often had a history of negative reactions to thyroid, DHEA, or estradiol; all of these hormones counteract cortisol’s levels/effects. Some had inflammatory diseases/disorders for which “steroids” are the most effective treatment. They felt and functioned much better when they were on prednisone. I offered patients a trial of cortisol (hydrocortisone) in physiological doses to see if it would help. For those who needed it, the effects were more immediate and dramatic than with any other hormone. Many patients felt better after just one dose. Over a few days their aches and muscle stiffness

disappeared. They could think more clearly. They felt energetic for the first time in years, sometimes decades. Their nausea disappeared and their allergies improved. Their inflammation was reduced. Their headaches went away. They felt less anxious. They slept better. Their digestion improved. By the simplest clinical logic, their dramatic improvements with physiological doses of cortisol proved that they had been suffering from hypocortisolism. They had been suffering from an endocrine disorder that could not be diagnosed by conventional endocrinologists.

I began to view all fatigue, achiness and cognitive dysfunction as due to cortisol and/or thyroid deficiencies until proven otherwise. I realized that relative some degree of hypocortisolism is very common in women—it is actually an aspect of the female reproductive endocrine system. Women's relative cortisol deficiency explains their much higher incidences of chronic fatigue, fibromyalgia, depression, anxiety, allergies, and autoimmune diseases. It also plays a role in many feminine disorders: premenstrual syndrome, premenstrual dysphoric disorder, endometriosis, hyperemesis gravidarum (nausea and vomiting during pregnancy) and post-partum depression. I gradually came to realize that many of the symptoms and syndromes for which medicine has no explanation are actually due, in full or in part, to hypocortisolism. This is why cortisol-like steroid drugs (e.g. prednisone, Medrol[®], etc.) are helpful for so many medical diseases and disorders, and why many people who are given them have marked improvements in the energy, mental function, and pain levels when given steroids. Cortisol is not only the one of the most powerful, but also one of the most complex hormones in the human body. It is also the most difficult hormone to replace. It, along with T3, form the foundation of the endocrine system. All other hormones counteract cortisol, and cortisol counteracts all other hormones.

I wanted to start sharing this information with the public and with physicians. I created an informative website at hormonerestoration.com. Many persons found me through their research on the internet and in online thyroid and adrenal forums. They came from as far away as California and some foreign countries to see me in this small town in northeastern Pennsylvania. I was consulted by several people who had hypopituitarism due to disease or surgery; they needed every hormone discussed in this book. They had been receiving grossly inadequate treatment at top teaching hospitals. I was able to greatly improve their quality of life. After just a few years, I had so many patients that I had to stop taking new ones.

As I saw the large role of cortisol, thyroid, sex steroid, and iron deficiencies in so many symptoms, disorders and diseases, in all medical specialties, I began to understand why I had not liked conventional general practice. Handing out a drug for every symptom is not only relatively ineffective but also unsatisfying. We humans are smarter than that. We want to find the cause and correct it; not just suppress the symptoms with a drug. Most doctors have this vague feeling of dissatisfaction, but cannot identify the source. They want to help their patients—to restore their patients' health and quality of life—but don't know how to do it. It should instead be standard medical practice to find and fix all disorders of the body's machinery (infections, toxicities, hormone/nutrient deficiencies, etc.) and then see what symptoms or problems remain, if any. Drugs should be used only when the cause cannot be found or corrected.

With time I came to understand how and why the profession of endocrinology has remained mired in its old assumptions and false beliefs. The alternative is to step into the unknown, as I have done. They would have to stop relying on population ranges to determine the diagnosis and treatment. They would have to stop relying on the TSH test to determine a person's thyroid status. They would have to start practicing clinical endocrinology—listening to their patient's symptoms and actually trying to help them with symptom-guided multi-hormone optimization. They would have to risk overdosing patients at times, and learn how to best avoid this problem without robbing the patient of the chance of greater improvement. They would have to become real endocrinologists.

Because I have helped people by breaking all the rules of conventional endocrinology, I and my patients are stuck in a difficult position. They have to interact with a medical system that does not understand their endocrine treatment and considers it dangerous. My patients' physicians tend to blame every symptom or medical problem that my patients have on the hormones that they are taking. They tell my patients that hormones are dangerous and they should stop taking them. They tell my thyroid patients that their dose is way too high because their TSH is low, and that they will suffer dire consequences unless they lower the dose. Hormone replacement is not a fountain of youth; my patients may already have advanced age-related diseases and they will eventually die of some cause. Whenever they do have a stroke or heart attack or are diagnosed with breast or prostate cancer, physicians blame the hormones they were taking—even though the evidence does not support the idea that proper hormone replacement increases the risk. Even when my patients have had their quality of life restored, endocrinologists tell them that they should not have been given the hormones in the first place because their tests were "normal". They tell my patients to wean off the hormones and get retested and treated according to conventional guidelines. In addition, my patients, some of them children, will need hormone replacement for the rest of their lives and most will have great difficulty finding another physician to continue their life-restoring treatment with these "dangerous" hormones, in "dangerous" doses. My patients will need my prescriptions until the day I die unless I can change the medical profession.

You may think that other doctors would be interested in new ideas that could help them improve their patients' lives, especially when those ideas are consistent with what we know of human physiology and with the results of scientific studies of hormone replacement. I thought that I could inform my colleagues by publishing articles in peer-reviewed journals. However, I quickly learned that medical journals, like all scientific journals, exist and function within the current paradigm; according to the current set of unquestioned assumptions. They cannot publish papers that reject that paradigm and propose a new one. Physicians are not philosophers; most are not even scientists. They are just trained professionals. They memorize rules and guidelines and do what they are told by to do by "authorities". The authorities, however, are also just products of the same training. Physicians have no motivation to question the paradigm in which they are trained; doing so would create uncertainty in their work. If they don't follow professional association guidelines they have to figure out what to do on their own. They have to do their own research and clinical experimentation. If they deviate from accepted practices, other

physicians think them to be ignorant or irresponsible. They could be accused of malpractice. They state medical board could take away their license to practice. So physicians generally stay in their box—believing and doing as they are told by their professional associations. Innovation must come from outside the academic fraternity, as is always the case.

I have written this book in order to change the paradigm; to provide the ideas and guidance that are necessary for the practice of effective clinical endocrinology. This book is written primarily for physicians, but also for any persons who want to understand endocrinology, or who seek answers for their own problems. This is not a textbook. There are plenty of sources for detailed information about the molecular biology, physiology and disorders of the endocrine system. I also do not discuss the treatment of diabetes or other endocrine disorders. This book is a guide to the diagnosis and treatment of deficiencies of T3, cortisol, DHEA, estradiol, progesterone, testosterone and growth hormone. I provide support for my ideas and practices with references to relevant papers. I reinterpret past research according to the ideas of the new paradigm and show that the facts support the new paradigm.

Endocrinology is the most powerful branch of natural scientific medicine. It is the natural starting point for a revolution in medicine—away from its current pharmaceutical model. Medicine must rediscover its true calling: to understand and correct the causes of our disorders or diseases. When medical practice is properly based in natural medicine it will be much more effective and therefore much more rewarding for both the physician and the patient. I hope to start this revolution by helping physicians in all specialties to understand the central role of hormones in human health and disease, and to become adept at diagnosing and treating hormone deficiencies. I also hope to empower patients with knowledge so that they can educate their physicians and obtain effective endocrine diagnosis and treatment.

Henry H. Lindner, MD

Tunkhannock, Pennsylvania, 2018

Notes on my use of references:

I have placed all references at the bottom of the page as footnotes. That way the reader can immediately see the source. To further improve communication, I have included a link to the PubMed citation or to the article's webpage. To save space, I list only the lead author for every paper and use an ellipsis (...) to indicate additional authors instead of the traditional "et al".

I use references somewhat differently than a conventional scientific paper; as support for a new interpretation of the facts; a new paradigm. I reference papers whose findings support this paradigm, even if the authors drew different conclusions from their research. Facts are facts, but in order to interpret the facts one must have sufficient knowledge and philosophical intelligence.

For simplicity and brevity, I will use the pronouns "he" and "she" as they apply to my own practice. I am a male and the majority of my patients (and endocrine patients in general) are female. So I will refer to physicians as "he" and patients as "she". This avoids the constant use awkward expressions such as "one", "he/she", "his/her", etc.