

The "Lowe" Down on Thyroid

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The Expert Report Interview With Dr John Lowe

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This segment of The Expert Report pulls no punches. My interview guest is Dr John Lowe, author of The Metabolic Treatment of Fibromyalgia,1 an extraordinary and comprehensive 1100-page text, which I found to be a fascinating journey through thyroid science. His groundbreaking work makes for a compelling link between fibromyalgia and the functional disorder of thyroid hypometabolism and tissue resistance to triiodothyronine (T3). Herein, he continues his outspoken views by taking aim directly at the endocrine establishment on thyroid metabolics and the usefulness of assessing thyroid status as now adopted under the standards of care. His extensive body of works, research, treatment discussions, and "everything thyroid" can be found on his website, www.drlowe.com.

Dr Lowe, I am very excited about this opportunity for our interview. I know that you will have a lot to share with our NDNR colleagues. The challenge will be to capture some of your outspoken brilliance, insight, and clinical pearls as one of the leading functional and authoritative thyroid intellects. Our ears and eyes are open, and we are taking notes. Try to keep it short, but don't leave anything out!

What is your educational background and current position?

I received my chiropractic degree from Southern California University of Health Sciences [Whittier] in 1977. I also have an undergraduate and graduate degree in research psychology from University of West Florida [Pensacola]. I am currently the director of research at the Research Foundation in Houston, Texas. Our foundational research was in the use of T3 in fibromyalgia patients and longer-term follow-up studies on the effects of thyroid hormone in this patient group.

Let's start off with this quote from your website: "I learned early during the last 16 years that the endocrinology specialty's judgment is corrupted by financial inducements from drug companies that profit from the TSH [thyrotropin] test and T4 [thyroxine] replacement." You're really taking on The Endocrine Society here. Why?

The simple reason for my taking on the endocrine community is that my mission in life is to relieve as much human suffering as I can. We have long had ample research evidence that T4 replacement simply doesn't work for and is harmful for too many patients. Consider a large community study2 of T4 replacement conducted in 2002 in England. Hundreds of patients from numerous clinics taking T4 replacement were matched with other patients who were not hypothyroid and not taking thyroid hormone products. The noteworthy results of this study were 3-fold: a hair short of 50% of the hypothyroid patients on T4 replacement still suffered from hypothyroid symptoms, they had a significantly higher incidence of 5 potentially fatal diseases associated with underregulation with thyroid hormone, and patients on T4 replacement had to take more drugs than did the matched controls to lower hypothyroid symptoms and better control other diseases that afflicted only the hypothyroid patients.

We have many such studies that bring into question the safety and effectiveness of T4 replacement for many hypothyroid patients. Whenever such studies are published, endocrinologists often resort to warped thinking to encourage hypothyroid patients to continuing T4 replacement as the only preferable approach. To me, it's obvious that something other than the scientific findings drive these endocrinologists to advocate the use of only T4 replacement, despite its lack of safety and confirmed harm.

What led you to become so passionate about the thyroid, its misconceptions, and the need for management revision?

I entered this passionate dispute for a clear-cut reason: I was overwhelmed by evidence that conventional [allopathic] endocrinologists and drug companies that profit hugely from their mutual interaction were depriving thyroid patients of good health and well-being. My own personal experiences, of course, were only a series of countless hundreds of others I observed in clinical practice. The endocrinology specialty, however, was adamant: "If you're on T4 replacement and still have hypothyroid-like symptoms, that proves that something else must be the cause of your symptoms." Despite the endocrinologists' assurances, I've been fully well on 150 g of T3 for some 25 years now. After all those years, in 2011, I had the pleasure of writing the Foreword to a book, Recovering with T3: My Journey from Hypothyroidism to Good Health Using the T3 Thyroid Hormone, by the British writer Paul Robinson.3 In the book, he describes being free from hypothyroid symptoms for 10 years by using T3 therapy alone. Keep in mind that this therapy, in the view of many endocrinologists, couldn't possibly have helped Mr Robinson, although it dramatically did after T4 replacement and other forms of thyroid therapy had failed him.

You research and write extensively on the inadequate thyroid hormone regulation hypothesis. What does this encompass?

The hypothesis simply says this: a wide variety of symptoms and signs that clinicians deal with are caused mainly by too little thyroid hormone regulation of cell and tissue function. Of course, one might reasonably ask, "Too little cell and tissue regulation of exactly what?" The answer to that question varies widely. Inadequate thyroid hormone regulation of different biological compounds may give rise to different symptoms and signs. The resulting symptoms and signs aren't necessarily the same from individual to individual. This requires that clinicians stay open-minded and diverse in their approaches to differential diagnosis. This clinical approach was used widely around the turn of the 20th century by the famed Dr William Osler and his colleagues. I've found that studying their publications encourages the proper orientation, which many of us call "clinical medicine."

Explain the treatment rationale of metabolic rehabilitation.

When I first devised metabolic rehabilitation, my intention was to create a diagnostic and treatment approach that resembled the systematic approaches to physical and cardiovascular rehab. I did my best to compare rehabilitating metabolic functions of patients' bodies and minds to the 2 better-known methods for rehabilitating patients: physical and cardiovascular health and well-being. In the case of metabolic rehab, the purpose was to help patients recover their full biochemical and physiological health and well-being. Our approach was to systematically correct any and all impediments to normal cellular and physiological metabolism.

What is the difference (and misconceptions) between hypothyroid and thyroid resistance?

The main misconception I hear comes from patients, although also from a few physicians. The conception usually expressed is, "I didn't get over my symptoms even after being on 1 grain of desiccated thyroid for 6 months. Does that mean I'm thyroid hormone resistant?"

Researchers have studied the 95th percentile in which most hypothyroid patients safely got well before the TSH became problematic in the early 1970s. That 95th percentile was 2 to 4 grains of desiccated thyroid, or 120 to 240 mg; in terms of the I-thyroxine, the 95th percentile was 200 to 400 mg. Partly because of these 95th percentiles, my treatment and research team traditionally hasn't considered that a patient may have partial cellular resistance to thyroid hormone except under one condition: that is, over several weeks, the patient reached 4 grains of desiccated thyroid or 400 mg of T4 with no improvement whatever and no thyrotoxicosis. At that dosage, the typical hypothyroid patient has begun to benefit from the dosage, and some have adverse effects. But if the patient has had no improvement of thyrotoxicity, we have traditionally begun the protocol proper for patients partially resistant to thyroid hormone.

When it comes to the thyroid, it seems physicians are not listening to many of their patients. They drive the laboratory results to a desired target as primary treatment criteria and insist that is where it needs to remain for symptom improvement. Yet, this often fails to improve or eliminate the ongoing hypothyroid symptoms. How has your research helped bridge that treatment gap?

My research group and others have measured the resting metabolic rates (RMRs) of hundreds of patients; in general, we've found that in the majority of cases RMR levels don't correlate with TSH levels. The free T4 never correlates—ever! The free T3 does correlate weakly, but only after we've included around 100 patients in a study. This finding with the free T3 means that it's statistically interesting but of no clinical value. The main aim of using thyroid function test results should be to normalize oxidative metabolism. That's what the RMR and basal metabolic rate (BMR) measure—the status of a patient's oxidative metabolism. But, studies show that we can't accurately tell what a patient's oxidative metabolism is from the free T3, free T4, or the TSH. The result of our studies is that reaching conclusions about a patient's metabolic status based on thyroid function tests is simply foolishness and almost always flat wrong. What is most worthy of note is this: as early as 1989, conventional [allopathic] endocrinologists had been avidly promoting thyroid function blood tests, without justification, as the "gold standard" of diagnosis. This was a presumption never scientifically warranted, nor is it any more today than it was in 1989.

You state that thyroid laboratory test results "are of no value in finding an effective dose." Should we throw testing out the window?

My belief is that thyroid function tests are of value only when way out of range. Studies show that when the free T3, free T4, and TSH are within range, or close to it, their levels vary, as Japanese researchers have written, "dramatically." Finding distinctions in the levels are, in general, a waste of time. The reason is that the levels vary statistically significantly about every 30 minutes. And, the levels don't reliably correlate at 30-minute intervals from day to day, nor from week to week.

How is thyroid resistance and rehabilitation distinguished from Wilson syndrome?

I would like to say that I'm grateful to Dr Dennis Wilson for advocating and garnering support for clinicians using T3 rather than T4 alone. I must emphasize, though, that based on systematic examination I cannot agree with most of Dr Wilson's positions that relate to health and thyroidology. I've known many hundreds of resistance patients who recovered with high T3 dosages. Yet, I don't know a single one who has maintained their recovery upon lowering their T3 dosages all or most of the way back down. Maybe some such patients exist. However, Richard Garrison, MD, of Baylor Medical College [Houston, Texas], and I spent a year diligently searching for cases and came up completely empty handed. I can't identify a single one out of the many hundreds of resistance patients I've treated over the years.

Is reverse T3 a strong component of thyroid resistance? Should we be measuring it as routinely as is being advocated by many functional medicine labs and practitioners?

Measuring reverse T3 has some diagnostic value in the realm of thyroid hormone resistance. It can be useful in identifying some conditions, especially those that interfere with the activity of 5' -deiodinase, the enzyme that converts T4 into the metabolically active hormone T3. The conditions include high mercury levels, as in some dental workers. They also include excess cortisol production during dental and surgical procedures. Say, for example, that someone acquires a permanent lock on 5' -deiodinase. This would increase the activity of 5-diodinase, resulting in excessive production of reverse T3. As reverse T3 appears to be metabolically inactive, this mechanism could have a devastating effect by slowing thyroid metabolism. Obviously, it would be important to identify this problem for the sake of correcting the patient's mechanism of thyroid hormone resistance.

Dr Swanson's comment: Dr Lowe suggests here that reverse T3 elevation is a less common occurrence and is mostly limited to certain groups. This would be in disagreement with the widely held view described by Dr Dennis Wilson (Wilson syndrome) that it is a much more common finding, resulting from chronic stress and excess cortisol production. Thus, their evaluation workup, diagnostic interpretation, and therapy approach would likely be different for the same patient.

With thyroid resistance treatment, elevations in serum T4/T3 will often exceed the upper reference limit. Reassure us on the adverse effect and safety management of thyroid rehabilitation therapy.

Over the decades, my treatment and research team has compared the TSH, free T4, and free T3 with measures clearly controlled by thyroid hormone: oxidative metabolic rates, ECG [electrocardiogram] voltages, basal temperatures, Achilles reflexes speeds, daily variances of cortisol and glucose, and many other biochemical and physiological measures. What we've found is this: the TSH, free T4, and free T3 do not reliably predict the other measures. In fact, the thyroid test results, as Japanese researchers have confirmed, are extremely poor predictors of biochemical and physiological measures of the effects of thyroid hormone. This has understandably led to a high level of distrust in the usefulness of thyroid function test results. Among many researchers who conduct such studies, the conventional [allopathic] endocrinology specialty's trick is divulged and over. Good riddance to the harm the test results have done.

Please update us on your landmark text The Metabolic Treatment of Fibromyalgia1 and its related chapter in the Textbook of Natural Medicine.4

In 2000, McDowell Publishing Company published my textbook The Metabolic Treatment of Fibromyalgia.1 In the book, I covered what I considered—and still consider!—the folly of conventional [allopathic] medical groups concerning the diagnosis and treatment of too little thyroid hormone regulation of the human body and mind. I also included what I consider the rational alternative to the irrational conventional [allopathic] view. Then, in 2005, Joseph E. Pizzorno Jr, ND, and Michael T. Murray, ND, approached me with an extraordinary offer. They asked that I write the chapter on fibromyalgia for the sagacious third edition of their Textbook of Natural Medicine.4 Much to my privilege, when the fourth edition of the textbook came due, they asked that I update and revise the fibromyalgia chapter, which I happily did.

Tell us a little about your current involvement with the online journal www.ThyroidScience.com.

My publisher started Thyroid Science5 at my request 6 years ago. My purpose was to provide a peer-reviewed journal of the thyroid field for clinicians, unfettered by the commercial and political motivations that dominate publications in the conventional [allopathic] endocrinology field. I've learned a great deal by reading and editing the widely diverse papers. We have an open invitation for naturopathic physicians to submit papers. There is no other discipline with which I feel a stronger brotherhood, and I wish this were shown in the pages of Thyroid Science.

Dr Lowe, this has been a short but fascinating insight to the understanding, evaluation, and management of human thyroid resistance. Before we close the interview, please give us one final thought and another clinical pearl from your vast thyro-treasure chest.

Clearly to me, the most important consideration is this: each clinician should understand that, by far, the free T4, free T3, and TSH are the most useless tests clinicians can employ in trying to identify patients who are hypothyroid or thyroid hormone resistant. These tests are little more than a 40-year-old financial enterprise, whose uselessness and harm are now scientifically too conspicuous.

Dr Swanson's closing comment: Thank you, Dr Lowe. Our NDNR readers will be thirsting for much more of you after this interview. I will simply direct that in-depth learning and education experience, along with the shear pleasure of reading and listening to Dr Lowe's brilliant thyroid intellect, to www.drlowe.com and to the additional references herein.6-21 There are so many who have benefited by your research and therapy protocols. Let me be the first to nominate you to the Thyroid Hall of Fame.

Mark Swanson, ND is a 1984 "pioneer" graduate of Bastyr University, and is in private practice in Sequim, Wash. He has been the senior medical advisor at a leading professional-label supplement company for 18 years; is a former editor of the Journal of Naturopathic Medicine; and has years of experience as a national product director, consultant, and representative to supplement manufacturers and functional medicine laboratories. Dr Swanson's clinical and research interests range from osteoporosis to metabolic syndrome/diabetes, cardiovascular disease, asthma and complex illness. Enjoying life on the Olympic Peninsula is a mandatory prescription for good health. E-mail him at gooddoc2@olypen.com.

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