## **A Thyroid Nightmare**

It was the same damn dream. This was the third night in a row that she was jolted from a deep sleep and had to calm herself down. Her heart rate soared to nearly 120 beats a minute. "This isn't real," she kept telling herself, but this unrelenting nightmare had repeated itself for the third consecutive night.

In her dream, she was just leaving the fitness facility where she trains twice a week with a personal trainer. Laura Marx was driving west on Route 4 in Fair Lawn, NJ, toward her home in Clifton. There was a light snow covering on the road with a bit of a flurry. Nothing treacherous, this was not a big deal, she's driven in these conditions hundreds of times before. Laura was a good driver and proud of her driving skills. This time, however, as she pumped her brakes to slow down, her car sped up. "What the..." She slammed on the brake pedal, but the car continued to race forward 40 mph, 50 mph, 60 mph. She couldn't stop the car. "What's happening here?" She reached down with her left hand to pull the floor mat away from the accelerator, but that didn't help. Her BMW 328ix continued to pick up the pace. Laura was doing everything in her power to control the steering; she couldn't stop the car, "why doesn't it stop?" Terrified she maneuvers around slower moving vehicles, speeding through stop lights, avoiding pedestrians and frantically looking for a snow bank to plow into. "Where is a snow bank?" She screams, "I've got to stop this car." Then she wakes up in a sweat, her heart racing. She realizes this was a bad dream.

Now Irv, her husband is really getting concerned. "Same dream?" "Every detail is exactly the same, I don't know what's going on and every day it's happening at around the same time." She looks at the Bose clock radio on the dresser just off the foot of the bed; it was 4:14 a.m. "I'm sure this is nothing," Irv commented, "it's just a dream."

Yes, it was just a dream, but just another component of a weird series of unexplained occurrences that have been happening to her over the last two years. It all started with a period of brain fog so oppressive that her ability to focus was nearly completely obliterated. Formerly an avid reader, Laura breezed through dozens of pages of her favorite novels only to realize that she hadn't any recall of anything that she had just read. "I'm not a stupid person," she mused, "I'm a Cornell graduate with a master's degree in communications from Princeton University." A senior editor for *Advertising Executive Magazine*, her job, in New York City, depended on her ability for extreme mental acuity, but now her ability to concentrate became severely compromised. This wasn't the Laura Marx she has known for nearly four decades!

A mother of three sons, Jason, Jordan and Joshua, she was starting to mix up her children's names. "Jason, hurry, you're going to be late for school."

"Mom, I'm Jordan and I'll be ready in two minutes," her ten-year old quipped. "Joshua, honey, please take out the garbage."

"Mom, you're looking at me, but I'm Jason," her precocious ten-year old countered.

She had mentioned to her husband Irv, more than a couple times, "I'm investing in name tags."

Although at the onset of her symptoms Laura was only 36, she was also starting to feel like a woman in her late 60s. She was more tired when she woke up in the morning than she was before she slipped into bed the night before. Even if she had gotten eight to ten hours of sleep, she found it difficult to crawl out of bed. This, combined with her forgetfulness, her inability to concentrate, her series of bad dreams, she had to admit, something was very wrong. "I think it's time to visit Dr. David Gold," Laura had admitted to herself. It had been several years since her last complete physical exam, so Laura realized that she was due.

While mornings were starting to be almost intolerable, she would continue to be compliant with a few supplements including a multiple vitamin/mineral, a vitamin E and a capsule of fish oil. After gaining several pounds over the last few months, Laura decided to eliminate breakfast, but would down two strong 12 ounce cups of freshly brewed black coffee to consume enough caffeine to muster an adequate amount of energy to get the boys ready for school and get her prepared to get to work. The 360 milligrams of caffeine certainly was able to keep Laura up because it triggered the flight or flight mechanism, but the excessive dose of caffeine made her dehydrated, shaky, and irritable, exacerbated her physical fatigue and drained her emotionally. Additionally, her adrenal glands, which were already exhausted, where working on overdrive. She was literally living on the edge, whereas the slightest exertion could cause a physiologically catastrophic incident.

On the day of her initial appointment with Dr. Gold, nearly two years ago, she and Irv entered the three-story professional building and walked toward the elevator when they noticed a note indicting that the elevator was out of order. There was no other choice, but to climb the three flights of stairs to Dr. Gold's office. Laura, who had been an accomplished varsity athlete throughout college, as a competitive swimmer at Cornell, should have had no trouble climbing three flights of stairs. This day, however, became a monumental task. By the time they had reached the third floor, Laura collapsed, shaking violently and on the verge of passing out. Irv ran to Dr. Gold's office to get help. The office staff called 911, while, Jonathan, Dr. Gold's physician assistant, administered CPR.

On her way to Beth Israel Hospital in Passaic she was in a panic. Not totally cognizant of what had transpired, Laura was flailing her arms dislodging the oxygen mask that was administered to her and screaming Irv's name. "Irv, what is happening to me? Where am I going? Where is Dr. Gold?" Irv and the entire EMT and paramedic staff were trying their best to restrain and console Laura, but

she was confused, disoriented, scared and terrified. Nothing like this has ever happened; she never had any significant health problems before. The worst thing she ever suffered was a concussion that was sustained at a swim meet in her junior year of college, when a competitor crossed into her lane during the backstroke segment of a 400 meter medley and slammed the back of her fist onto Laura skull. Amazingly, Laura finished that race amassing one of her fastest times ever for that event.

There was great concern as nobody could have predicted the seemingly serious circumstances that were unfolding. The hospital was only about five miles away, but to Irv, it was the longest five-mile ride of his life. The ambulance pulled up to the entrance of the emergency room, Laura was transported into the hospital and was fortunate to have a bed available for her almost immediately. Irv was a wreck, held Laura's hand for nearly six hours while the nursing staff had performed some preliminary assessments, including blood pressure monitoring, EKG, hook-up an IV and took some blood gas measurements.

The suspense of not knowing what is wrong was emotionally crippling. Laura was suffering from shortness of breath, anxiety, palpitations and hysteria. "Was she having a heart attack?" Irv's mind was racing, "how can a healthy 36-year-old woman be having a heart attack?" "Yes, she was under stress, a full-time demanding executive position, three sons and me. Did I do anything to cause this?"

After six hours the emergency doc walked in and spoke calmly to both Laura and Irv. "My name is Dr. Omansky. Laura, all of your tests are normal and your heart is fine. We'll send your results to Dr. Gold and he'll review these with you. You had an anxiety attack, I'm prescribing a two-week supply of Xanax, it will help you relax." "But, Dr. Omansky, I've never had anxiety before, why all of a sudden am I experiencing these symptoms?" Laura inquired. Dr. Omansky explained, "anxiety can occur unpredictably, often have no obvious cause and can, itself, create fear of further attacks. These attacks may be triggered by a stressful event, but usually come on with no identifiable cause."

Dr. Omansky suggested that Laura speak to a psychiatrist, "someone in social services may be able to give you a referral. If not, consult your primary care doctor for someone who he may recommend."

Greeting them at the hospital was Laura's sister, Rona, who escorted them back to retrieve their car left at Dr. Gold's office. "I don't understand what's going on here," Laura had noted. "I've always been healthy. I'm worried. Something serious is going on and I'm scared. I'm only 36 years old and feel like an old lady. Will a two-week round of Zanax turn everything around? Is this some kind of miracle pill that will reverse all of my symptoms?" Laura was rambling, she wanted answers, but knew that Irv and Rona were equally in the dark. Irv was worried. Laura was his entire life. He married his best friend and he worshiped

and adored Laura and was willing to do whatever is necessary to get her through this. Additionally, Laura and Rona, who were only 18 months apart in age, were as close as two sisters could possibly be with each other. While Rona had her own troubles, a nasty divorce and a stillborn pregnancy four years ago, she could empathize with what her sister was going through. They were so close, she could literally feel Laura's frustration, pain and confusion.

Laura was able to reschedule her appointment with Dr. Gold the following week. This time the elevator was working fine. Laura and Irv had a 2:00 p.m. appointment and it wasn't until 3:45 p.m. that they were escorted into an examination room. Jonathan, the physician assistant, entered the room with his clip board and asked. "Tell me, how you are feeling?" Laura, always had been impeccably prepared, presented a comprehensive list of her symptoms. Her list included the following:

- brain fog
- forgetfulness
- dizziness
- anxiety
- exhaustion (especially in the morning)
- > irritability

- depression
- body aches
- constipation
- > weight gain
- hair loss
- occasional rapid heart beat
- poor exercise tolerance

Over the next 15 minutes, Jonathan recorded notes onto Laura's chart, performed blood pressure readings, took her temperature, listened intently though a stethoscope while he poked and prodded, then plunged an otoscope in both ears, took some notes and dashed out uttering, "Dr. Gold will be in to see you shortly." Shortly was 20 minutes later!

Dr. Gold walked in with a big smile, "Laura, how are you? We haven't seen you in a couple of years."

"Maybe if visiting you wasn't an all day affair, I'd see you more often," Laura asserted.

Dr. Gold ignored Laura's sarcasm and proceeded to address some of her medical complaints. "Laura, this is a request for a comprehensive blood chemistry, take it to the lab, additionally, I'm giving you two prescriptions to help you feel better. Once the results are available we'll call you to come in to discuss them. In the meantime, get these filled at your pharmacy and take them as directed."

"Doctor, what am I..." Laura started to ask, but Dr. Gold abruptly turned toward the door and left the examination room.

Frustrated and angry, Irv checked his watch, "he was with us for exactly three minutes. Three minutes! We waited for him for over two hours and he gives us three minutes?"

Checking online for information on the prescriptions Dr. Gold has recommended, Laura realized that she was given an anti-depressant called Effexor XR, which

according to the company's (Wyeth) *Website www.effexor.com*, is a prescription antidepressant indicated for major depressive disorder, generalized anxiety disorder, panic disorder, and social anxiety disorder. Common side effects include nausea, dizziness, sleepiness, sexual side effects, sweating, dry mouth, nervousness, insomnia, loss of appetite, weight gain and constipation. "This is crazy," Laura screamed to Irv. "These are the symptoms I already have, this doctor is nuts. Isn't anyone listening to me? Except for the dry mouth, I already have every one of these symptoms. Now I can take this drug and be more dizzy, more nauseous, sleepier, is that possible? more constipated, less interested in sex and more nervous. And I can be fatter than ever. Wouldn't you be interested in me if there was more to love? Great, why wouldn't I want to take this drug?"

"What's the second drug?" Irv blurted, then mockingly "maybe the second one is intended to reverse all of the side effects of the first drug."

"The second drug is something called Strattera. It's supposed to eliminate my brain fog. It says here on the Strattera Website (www.strattera.com) that Strattera is a non-stimulant medicine approved to treat attention-deficit/hyperactivity disorder (ADHD). The most common side effects of this one includes constipation, dry mouth, nausea, decreased appetite, dizziness, trouble sleeping, sexual side effects, menstrual cramps, and problems passing urine. Sound familiar? This is lovely! These are the same side effects as the first one. Could you imagine, along with the symptoms I already have, if I took both of these. You would really have to send me to the looney bin."

"Irv, what do you think I should do? Should I wait until we get the results of the blood tests? Should I be seeing someone else?" Laura was desperate for answers, but Irv, an accountant with no knowledge of medicine, didn't have an answer.

"This is very frustrating, Laura. I wish I had some information to help guide you, but I haven't a clue. Maybe we should wait until the results come back and then see if he can give us more time and answer some of our questions and concerns."

"Should I call him and ask him about these medications?" queried Laura.

"Did Gold look like he was interested in taking any more time with us than he did?"

"This is frustrating, but I do know that I don't want to be drugged up, especially with medicines that may make me feel worse. I agree, we should wait until we get the results of the blood test. I'll make an appointment with the lab and get it drawn tomorrow morning."

"Laura Marx," Laura said after answering her office line.

"Laura, this is Betty, I'm one of the nurses at Dr. Gold's office. He asked me to call you to tell you everything in your labs was fine and to keep taking the medicines he prescribed."

"I'd like to speak with him about my symptoms and go over the reports," Laura recounted.

"There's not much Dr. Gold can tell you if your lab tests are within the normal range."

"There's got to be something wrong if I'm feeling the way I'm feeling."

"Maybe you're just under some stress, take some time off and relax. You'll be just fine. Everything was perfect, you are in great health," Betty assured her.

"Please send me the report; I'm going to have to change doctors if Dr. Gold refuses to speak with me." Laura protested.

"Laura, you can do whatever you wish, but if your labs are normal, what do you expect Dr. Gold to tell you? The symptoms you're experiencing are commensurate with life's stresses; Dr. Gold gave you the correct remedy for your condition. He advised me to tell you that the medications he prescribed are appropriate for what you are experiencing."

"Betty, I'll be there tomorrow morning to pick up my labs, please have a copy ready for me when I arrive. There's got to be more sympathetic doctors who really care about their patients."

Laura arrived at Dr. Gold's office first thing in the morning to retrieve her blood reports. Of course, Laura wasn't exactly sure what she was going to do with them. She didn't understand how to interpret the results, nor did she have any idea who to ask or which doctor she should switch to that was on her insurance plan. She was still at square one, but it seems as if she's getting worse every day. Dr. Gold has been her primary care doctor for more than a decade. Although she didn't see him very often, he was there to prescribe an antibiotic when she got the flu, an anti-inflammatory when she strained her knee from playing soccer and a cortisone shot when she had tennis elbow. Other than those few episodes, there wasn't much reason to seek his counsel. Now Laura was really sick. Something was very wrong and she needed someone who had a bit more compassion than Dr. Gold! Laura was so angry that she did something that even surprised her. As she was leaving she noticed that the waiting room was packed with patients. She decided to make an announcement, "hey everyone, be prepared to wait for at least two hours to see this doctor. He doesn't care about any of you, you'll be lucky if he gives you three minutes of his

time. Don't ask him any questions because he won't answer them anyway. If you really care about your health, you'll find another doctor that's more compassionate than him." Then Laura stormed out of Gold's office!

Laura was so despondent that she decided to take the day off. She called her office and told her secretary that she was going to work from home. "You know," she said to herself, "I want to do some things for myself. I'm going to have a day of beauty." Laura opened her Blackberry and called Mademoiselles' Spa and Salon in Montclair. "Melissa, this is Laura Marx, do you have any openings today?"

"Laura, great hearing from you," responded Melissa, what services were you looking for?"

Laura, said, "I need the works, facial, hair, nails and maybe a massage."

"We have an opening this morning at 11, can you make it?"

"I'll be there," Laura confirmed ecstatically.

During her facial, Laura was spilling her sorrows to Melissa. "I just don't know why all of this is happening to me."

"You know, Laura, my sister Victoria had the same exact symptoms that you're telling me. She had a thyroid problem. She felt awful for a long time and her doctors kept on telling her that there was nothing wrong with her. Just like you, she was prescribed antidepressants and tranquilizers. She started taking them and became as big as a house, plus they made her symptoms worse. There was never anything wrong with her head, it was her thyroid! Vicki's symptoms were identical to what you're experiencing, now she's on a thyroid medication and she's 150% better, not perfect, but she's doing real well."

"I don't know if they checked my thyroid," Laura mentioned. "I have the blood report, picked it up this morning, but I have no idea how to interpret the results. I need to find a new doctor. I am now persona non grata in that office." Laura confessed her recent malfeasance when she left Dr. Gold's office.

Leaving Mademoiselles' four hours later, Laura felt great. She purged her frustrations to Melissa and her husband Eugene while getting pampered with a facial, a great massage, a new set of nails and a make-over. She felt and looked like a new woman. Her day of beauty set her back \$785 with all of the tips, but worth every penny. Hopefully, the best news was that she left with the name and phone number of Vicki's doctor. She first had to see if this new doc was a participant in her healthcare plan.

By the time Laura got home, she discovered that Dr. Leonardo Franco, an endocrinologist in Hasbrouck Heights, was a provider covered in her plan, but after calling she discovered that he was booked solid for the next three months and wasn't accepting any new patients at this time. "I can't believe this," Laura said to herself, "there's got to be a way for me to get to see him." By this time in Laura's desperation, she was resorting to covert tactics.

Laura pressed redial on her Blackberry, "Dr. Franco's office, this is Marybeth." "Hi Marybeth, how are you? This is Betty at Dr. David Gold's office," Laura tried her best to disguise her voice. "We have a patient that we'd like to refer to Dr. Franco. Dr. Gold feels it's important that she be seen by an endocrinologist as soon as possible. Her name is Laura Marx. If she calls within the next few minutes, is it possible for Dr. Franco to squeeze her in to his schedule?" "We'll do our best Betty, have her call and ask for me."

After the usual office introduction, "hello Marybeth, my name is Laura Marx; I believe you are expecting my call?" "Yes, dear, you are looking to schedule an appointment with Dr. Franco?"

"Yes, it's important that I see him as soon as possible. Does he have anything for this week?"

"Can you be here tomorrow at three?"

"Of course, I'll be there a little early to fill out any required forms." Laura gave her all of her requested information including her insurance carrier, phone number, address and reason for her visit. "I have my recent labs reports with me so you needn't call Dr. Gold's office for anything," a stealthy move by Laura to avert any potentially embarrassing call to Dr. Gold's office.

That evening she confessed to Irv about what had transpired during this eventful day, starting with playing hooky from work.

"What have you turned into?" exclaimed Irv in astonishment.

"I'm feeling desperate," replied Laura, "someone's has got to know how to help me, there has to be some physiological imbalance that is causing the symptoms that I'm experiencing," as she continued to relay the events of the day to Irv. "I need to perform some research before I see Dr. Franco tomorrow, based on what Melissa was telling me at the salon about her sister, it sounded like she was describing my symptoms to a "T," and this doctor that I'm seeing tomorrow was the one who helped Vicky. She had a thyroid problem and now she is much better. I'm wondering if I've got the same problem. I'm going to perform an Internet search for thyroid symptoms and see what comes up."

Two hours later, an ecstatic Laura stormed into the bedroom where Irv was watching Thursday night football, a heated rivalry between the Minnesota Vikings and the Chicago Bears. "Irv, check this out," Irv paused the live action, thanks to the DVR technology, "I Googled thyroid, check out all of the symptoms associated with underactive thyroid." Laura presented a list of 36 different complaints, "I've got at least half of these, the only thing missing on this page is my photograph!" quipped Laura. "Do you believe that Dr. Gold didn't identify these obvious thyroid symptoms? Maybe he didn't even pay attention to any of the symptoms I described. How is it possible that I perform a two-hour search on the Internet and discover all of this information and a doctor like Gold, who attends four years of medical school and has been in practice for at least 30 years, doesn't acknowledge them? Does this make any sense? Or is it because he just doesn't care anymore? Is this typical of most doctors today or is it just

him?" Laura heighted her intensity with each rhetorical question she raised. "I just hope this new guy that I'm seeing tomorrow can find something and come up with a solution"

Armed with an arsenal of information and lots of questions, Laura embarked toward Dr. Franco's office. She arrived at 2:35 p.m. for her three o'clock appointment and signed the office logbook. She was given a couple of forms to complete, one confirming her insurance information and the other entered a collection of basic contact information. Since Laura had expected that there was going to be a considerable wait before Dr. Franco got around to seeing her, Laura brought her new Kindle, an electronic reader. She had about a dozen novels stored, but last night she purchased a book titled, *Thyroid Power* written by Dr. Richard Shames and his wife, Karilee. The book was favorably reviewed on the Amazon Website so she figured that while she was waiting she would acquire some knowledge so she wouldn't be completely in the dark when Dr. Franco entered the examination room to consult with her. The only negative comments were that it was elementary, but since Laura knew nothing, elementary was a good thing.

By the time Laura got about ten percent into the book (digital books do not have page numbers), there was a symptom questionnaire. She took out a pen and a pad of paper from her purse and started to check those questions that corresponded to her. She was suddenly taken aback by the question relating to past exposures to chlorine, fluoride and bromine. Laura hadn't a clue what bromine was, but all of her life she used a fluoridated toothpaste and, most importantly, she was a competitive swimmer. Every pool was heavily chlorinated. Using the search feature, she entered chlorine and was directed to a page that was headed, "Other Water Hazards: Chlorine in the Swimming Pool." According to Shames, it has been suggested, though not yet scientifically proven, that one way that chlorine inhibits the utilization of, a comparatively weaker, iodine compromising the production of thyroid hormone. As an example, one of their patients started a swim program at a local high school pool and, after just a couple of weeks, starting developing significant decline in her cognitive abilities.

"Swimming," she thought to herself, "was supposed to be a healthy exercise; what could be healthier than swimming an hour or two a day?" She would never fathom that there was an association between her many years of swimming and the debilitating symptoms she's now experiencing. "Could that be possible?" she muttered under her breath. She realized that she was thinking out loud, but kept her head down as she suddenly became a bit embarrassed that someone would think she is mentally disturbed.

A thought came to mind, "remember when we saw someone standing on a street corner having a conversation and nobody was near them and we thought they were crazy? Now you could bet that they are on their cell phone." Laura started

to laugh, but put her hand in front of her face as to not be as obvious, but several of the patients nearby looked at her and smiled, thinking that she was merely reading a funny passage in her electronic book.

At 4:30 p.m. Laura heard her name called. "Hello Laura, my name is Jeanne, I'm Dr. Franco's physician assistant and I'm going to get some information from you before Dr. Franco comes in to see you." In examination room, Laura handed her recent blood chemistry to Jeanne and her list of symptoms. Jeanne proceeded to get blood pressure readings, check her pulse and looked into Laura's eyes. She then briefly glanced at Laura's blood chemistry. "It says here that you were referred to Dr. Franco because you suspect that you have a thyroid disorder, but your level TSH level is very good. See here the reference range is .5 to 4.5; your level is a safe 3.65. Whatever symptoms you seem to be experiencing don't seem to be thyroid-related," exclaimed Jeanne, "but I'll have Dr. Franco speak to you. He should be in to see you in just a couple of..."

Laura interrupted Jeanne and bellowed, there's only a TSH on this report. From my research TSH isn't even a thyroid hormone," Laura felt confident after her research from last night, "there was no test for total T4, T3 or a free T3. How could you be sure that it isn't a thyroid problem unless you are looking the entire panel?"

Jeanne responded as if she had been asked this question a thousand times before, "According to the American Association of Clinical Endocrinologists (AACE) guidelines: The most valuable test is the sensitive measure of the TSH level, the TSH assay should always be used as a primary test to establish the diagnosis of primary hypothyroidism and the only other recommended test is the free T4. Total T4 and free T3 are not listed as acceptable routine tests.<sup>2</sup> I'm not sure Dr. Franco would authorize those tests for you. Generally when we order Free T3 and Free T4 tests they are only for patients with hyperthyroidism or overactive thyroid. It would be unwise to use those tests for someone with hypothyroidism. He should be in to see you in a minute; ask him."

Within a minute, an expressionless Dr. Franco entered the room. Without introducing himself, he asked Laura why she thought she had a thyroid problem. As she did with Jeanne his PA, Laura presented her list of symptoms. "These symptoms that you are experiencing are nebulous and could be related to any woman nearing her 40<sup>th</sup> year. Have you had a complete gynecological exam with an assessment of your hormones? There doesn't seem to be anything wrong with your thyroid; it is well within the normal range." "How about running the other elements of the thyroid panel," Laura blurted.

"We don't authorize that unless we have strong suspicions of thyroid disorder, especially if we suspect overactive thyroid and I don't believe that there is anything wrong with your thyroid."

"How about this reference to chlorine and the inhibition of iodine metabolism, I was a swimmer."

"Laura, with all due respect, you will find all types of hogwash on the internet. I recommend that you stop looking on the computer, listening to quacks and manufacturing diseases."

Laura left Dr. Franco's office more frustrated, anxious and scared than ever before. All of the research she had conducted indicated that a TSH wasn't a sufficient indicator of thyroid dysfunction and this doctor, an endocrinologist, was not acknowledging any of her symptoms. She was not, however, going to give up this fight, she was more determine than ever to find out what was wrong.

It was now 5:15 p.m. and knew that Irv was on his way home. She called him on his cell phone to air her anguish and disappointment, but assured him that her fight for answers is just beginning. "I'm going to find someone who will listen to me and make the connection. I'm more confident than ever that my problems are thyroid related, I just need to find someone experienced and compassionate enough to listen to what I'm saying."

Over the next couple of years, Laura had visited a myriad of primary care doctors and specialists that were participants in her insurance plan. She honestly couldn't believe some of the ridiculous comments that these "so-called" medical professionals were saying:

"I've seen people with a TSH of 10, 20, and even one patient with 60, so 3.65, which is in the normal range, really isn't bad, and couldn't account for all of the symptoms you are feeling"

"You probably had some emotional trauma during childhood. Your symptoms are caused by depression. You need Zoloft or Effexor."

"You must have bad genes. Some people just have less energy than others; you've got to learn to live with it."

When she asked about adrenal insufficiency, one doctor inquired, "do you feel that you have Addison's disease?"

At last Laura found Dr. Michael Osterman who agreed to order a complete thyroid panel including a total T4, a total T3, a free T3, a thyroid peroxidase (TPO) and a thyroglobulin. All of the values did come back within the reference ranges with the exception of the free T3 and an elevation is her LDL cholesterol. Laura was given prescriptions for both synthroid and simvastatin, a cholesterol lowering drug.

At this point Laura developed a respectable body of knowledge relating to thyroid imbalances. She questioned this doctor on his rationale of prescribing a T4, when it was her conversion from T4 to T3 that seemed to have been the problem. His response was, "are you the doctor or am I the doctor?" When she

inquired about taking natural desiccated thyroid, his response was, "do you realize that it's PIG THYROID, that's disgusting!"

The fact that this doctor was wearing a yarmulke, a skullcap worn by Jewish orthodox males, Laura realized that he didn't touch pork so Laura then asked, "do you have a problem prescribing pee from pregnant horses?" She then left his office refusing to pay the insurance co-pay and left the two prescriptions on the receptionist desk.

Finally, she went to another doctor and when she asked him about Armour thyroid, he kept saying he doesn't recommend the "Armour All." He stated, "most doctors wouldn't put anyone on "Armour All."

"Excuse me Doc, Armor All<sup>®</sup> is the protectant product that I use on my car dashboard, I'm referring to Armour thyroid or natural desiccated thyroid." She then added, "you should check your Physician's Desk Reference for the correct name," not caring about whether she was being insulting or not. Laura was a bright woman; she knew it and was not going to be treated like an idiot by these "so-called" professionals.

Several weeks later, after discussing her situation with Heather Scott, one of the personal fitness trainers at her health club, Heather inquired, "have you ever consulted with a naturopathic doctor?"

"I never heard of a naturopathic doctor," Laura said.

Heather explained that a naturopathic doctor is a trained health practitioner who doesn't treat disease; they deal with the imbalances that may precipitate a disease state. They are like detectives, looking for imbalances, deficiencies and predispositions that lead to physiological disturbances. "I know a very good naturopathic doctor who, I believe deals with a lot of thyroid issues. He helped a client of mine who was seriously ill and now she's doing extremely well." If you're interested, I will get you his name and phone number and can call you later tonight before I leave the gym.

That evening Heather called Laura with the name of the naturopathic doctor who was located in her hometown. "His name was Dr. Bruce Oreg," she furnished Laura with Dr. Oreg's phone number, address and Website information. She also mentioned that her client Deirdre had offered her phone number if Laura wanted to get more information. Laura was extremely grateful and did express an interest in speaking with Deirdre and thanked Heather for all of her help. Laura promised keep Heather apprised of whatever decision she would make, as well as her experience with this practitioner.

Deirdre was fabulous; she and Laura spent nearly an hour on the phone together. Afterward, Laura was convinced that this was a logical path to take. Deirdre was about four years older than Laura and had many of the same

symptoms when she first visited Dr. Oreg. Deirdre also recalled many of the same experiences with medical doctors, being extremely dismayed by conventional medicine's approach to sub-clinical thyroid imbalances, which denotes that although the blood chemistry values were within the established reference range, the thyroid isn't functioning optimally, creating innumerable symptoms.

Laura needed a physiological detective! After researching Dr. Oreg's credentials and passing his office a couple of times, she decided to make a call even though she still wasn't absolutely sure what a naturopathic doctor was.

"Hello, my name is Laura Marx and I think I'd like to make an appointment with Dr. Oreg, but I would love to speak with him first, is that possible?"

"Currently he's with a patient," Kathleen, Dr. Oreg's office manager, told Laura, then asked, "can I have him call you back? He'll be available at 4:00 this afternoon, does that work for you?"

"I'll be expecting his call, Kathleen, thank you."

"I don't really understand much about naturopathy," confessed Laura, "but, I've heard some good things about you. Could you tell me something about your approach in assessing and managing hypothyroidism and what I might expect as a patient?"

Dr. Oreg responded, "Typically, naturopaths spend a considerable amount of time with each patient, investigating, fact-finding, analyzing and testing various components to determine physiological areas of imbalance, food intolerances, levels of toxicity, habitual emotional or behavioral patterns and structural deviances, all which may present themselves as disturbances, potentially affecting any organ or organ system in the body.

"What type of tests do you perform?" queried Laura.

Realizing that he was speaking with an intelligent individual, Dr. Oreg responded, "we have a 16-page intake form which is intended to gather information on your symptoms, lifestyle and dietary preferences. I spend a considerable amount of time analyzing blood chemistry from a functional perspective, looking at the relationships of values, rather than focusing on any one value in isolation. I also take hair samples to assess incongruities in mineral balance; I may also analyze urine and saliva samples and can also order, if necessary, various functional laboratory tests such as a food sensitivity test. Additionally, since you suspect a thyroid issue, I will also perform a couple of in-office adrenal function tests to determine an adrenal/thyroid connection. Naturopathic medicine is about correlating patterns and continuity of findings utilizing several different clinical assessments to confirm suspected imbalances."

"Once I've gathered all of the pertinent information," Dr. Oreg continued, "I'll prepare a comprehensive, personalized report which will feature my interpretation of your assessments, information on your specific conditions and concerns, my clinical recommendations and references to support those recommendations. My suggestions may include restriction of certain foods or categories of food, specific dietary modifications, vitamin, mineral or herbal supplementation, physical exercise and/or mind-body behavioral therapies."

After confirming her intention, Dr. Oreg instructed Laura to record her morning basal metabolic temperature each morning until the day of her visit according to the guidelines presented in the 1976 book, *Hypothyroidism: the Unsuspected Illness*, by Broda Barnes, M.D. The test calls for a morning underarm temperature sampling for ten days in a row, (menstruating women should start on the third day of their cycle, according to Barnes).<sup>3</sup>

Dr. Oreg realized that temperature testing is not infallible, and like any other test, should not be relied on in isolation. It, however, is a valuable piece of the pie if used expeditiously. Basal metabolic testing also facilitates the monitoring of a thyroid protocol to assess desired outcomes.

Adjunctive to the determination of optimal thyroid performance administering daily temperature test may be an important indicator of adrenal function. On his Website (http://www.nihadc.com)<sup>4</sup>, Dr. Bruce Rind, M.D., describes his system of taking thrice temperature measurements and noting variations. If the average temperatures fluctuate from day-to-day by more than .2 to .3°F, adrenal support is necessary.

Once Laura felt assured that a visit to Dr. Oreg was warranted, she confirmed her intention. The call was transferred to Kathleen and an appointment was scheduled for next Thursday at 10:00 in the morning. Kathleen proceeded to remind Laura which forms to download and complete and to have her most recent blood chemistry faxed to Dr. Oreg prior to her visit.

In preparation, Dr. Oreg studied the blood chemistry that Laura had faxed prior to her appointment. Some of the important relevant values and corresponding reference range and functional ranges were the following:

	<u>Actual</u>	Ref. Range	Func. Range
Fasting glucose:	103	65-115	78-96
RBC:	3.9	3.8-5.1	4.0-4.5
Hemoglobin:	12.4	11.5-15.0	13.5-14.5
Hematocrit:	35	34-44	37-44

MCHC:	35.5	32-36	32-35
Potassium:	3.7	3.5-5.3	4.0-4.5
Sodium:	146	135-147	135-142
Total Cholesterol:	202	130-200	150-220
HDL:	42	40-90	>55
TC/HDL Ratio:	4.80	<4	>3.5
Triglycerides:	132	30-150	70-110
TSH:	3.65	.35-5.0	.8-2.4
Total T4:	9.8	4.8-13.2	6-12
Free T3:	74	80-230	100-230
25 Hydroxy vitamin D:	24	20-80	50-100

Laura arrived at Dr. Oreg's office Thursday morning at 9:38 a.m. She greeted Kathleen, they exchanged light conversation then handed Kathleen her completed forms and the results of the morning temperature readings Dr. Oreg had requested. While Dr. Oreg was reviewing her lifestyle and initial symptom questionnaires, Laura removed a notepad and her Kindle from her briefcase. She scribbled a few additional reminders to herself, than began to read. Unlike a typical medical doctor's office, however, Laura barely had time to turn on her reading device before Dr. Oreg promptly introduced himself and asked Laura to enter his office.

Dr. Oreg's office was neatly appointed with hoards of diplomas, certificates, awards and confirmations of his continuing education adorning his walls. She quickly glanced around noticing his bookcases, which were filled with some very impressive medical textbooks including: *Medical Physiology* by Guyton and Hall, *Harrison's Principles of Internal Medicine*, *Endocrine Physiology*, *Functional Medicine*, the *Physician's Desk Reference* and countless books on botanical medicine, clinical nutrition, biochemistry and exercise physiology.

"I really don't know what you're going to be able to do for me," Laura proceeded to confess her frustrations with all of the doctors she had seen prior to this visit. "I'm just hoping that you have the magic bullet that's going to bring me back to life. Quite frankly, I'm burned out, I'm constantly tired, my concentration is cloudy, I often feel disoriented, I'm extremely tired when I wake up in the morning, even when I think I've gotten a good night's sleep. I still feel anxious, a

bit depressed and I'm constantly bloated. I've also gained 30 pounds in the last three years. Am I the most demanding case you've ever had?

"Unfortunately, Laura, you are typical of many patients that I've seen. However, from a conventional perspective you don't fit the physical profile and most of your labs are well within the reference ranges. Medical docs are trained to look for specific signs and if you don't fall with those parameters you are healthy. Naturopaths, on the other hand, I'm looking at your temperature readings. Thanks for doing this for me, it is extremely helpful." Over the last five days, Laura's results were as follows:

- 1. 94.7
- 2. 95.6
- 3. 96.5
- 4. 94.8
- 5. 96.0

"Laura, optimally, we like to see temperatures between 97.8 and 98.6. Significant decreases are generally indications of an underactive thyroid.<sup>3</sup> Additionally, your blood chemistry reveals a thyroid imbalance." Dr. Oreg proceeded to point out the deviations and their significations.

"Both your fasting glucose and your triglycerides are elevated indicating some blood sugar dysregulation. Taking into account your high LDL cholesterol and low HDL cholesterol, it is suspected that you have a condition called insulin resistance or metabolic syndrome. These signs may also be a consequence of underactive thyroid"

"You are also borderline anemic with low RBCs, low hemoglobin and low hematocrit. The MCHC we use as a barometer to indicate whether your anemia is as a result of low iron or some of the B vitamins. Being on the high side of the MCHC, you are either B-12 or folic acid deficient or both."

"Laura, even though your vitamin D is technically within the reference range, it is, in essence extremely low at 24. The designated laboratory ranges are still archaic, as the optimal range is 50-100, with 60 and above as the most desirable." Deficiencies in vitamin D can be a risk factor for thyroid dysfunction."

"Now, while your T4 is in a perfect range, T4 is the inactive storage thyroid hormone. It must be converted appropriately to T3. As you can see, your T3 is low so there is some inhibition in the conversion. Most endocrinologists only recognize T4 and surmise that overdosing you with T4 will solve the T3 issue. From my experience, this doesn't always work, otherwise those patients on T4 medications such as Synthroid and Levoxyl wouldn't continue to suffer from the typical low thyroid symptoms. In your case, you were smart in refusing the T4 prescription. Additionally, Laura your TSH is within the conventional laboratory

range, it is well outside the functional range of .8 to 2.4. From a naturopathic perspective, we would suspect an underactive thyroid, especially when factoring in all of the symptoms that you're experiencing."

This was the perfect moment to ask Dr. Oreg one of the puzzling questions she had listed on her notepad. "If T3 is the active hormone and T4 is considered a prohormone, why doesn't the thyroid release T3 instead of T4?"

"Great question, Laura. The answer is for the same reasons that Campbell's puts its soup in cans instead of steaming soup bowls. It travels better and it is available when its needed." Laura laughed at the answer, but nodded in acknowledgement.

"Finally, there is a discrepancy between the values of your sodium and potassium. As you can see here your sodium is high in the range while the potassium is low in the range. This is a possible signal of adrenal hyperfunction, which is an over production of cortisol or hypercortisolemia. We could also perform a couple of additional tests to confirm this possibility. Chronic hypercortisolemia results in a decrease in T3 and increase the level of the inactive thyroid hormone reverse T3 (rT3). This over production of cortisol downregulates the production the enzyme which is responsible for the conversion of T4 to T3 (5-deiodinase), which is apt to sustain your symptoms even when the rest of your thyroid panel is within the desired ranges."

Dr. Oreg continued by itemizing some of the contributing factors that may inhibit the conversion of T4 to T3 thyroid production.

- ➤ Deficiencies in selenium, zinc, iron, iodine<sup>6</sup>
- Cadmium, mercury or lead toxicity
- > Excess copper
- ➤ High calcium to magnesium ratio
- Excessive goitrogenic dietary elements (cruciferous, soy)
- ➤ Deficiencies in vitamins A, B-2, B-6 or B-12
- Inadequate protein intake
- High carbohydrate diet
- Blood sugar dysregulation
- Aging
- Alcohol abuse
- Chronic illness
- > Inflammation
- Food or environmental sensitivities
- Dioxin or PCB exposure
- Medications such as beta blockers, birth control pills, hormone therapy or chemotherapy<sup>7</sup>

"Another factor that may have contributed to this problem," Dr. Oreg muttered, "is the fact that during your college years you spent a considerable amount of time in a chlorinated pool. Chlorine is a member of the same family as iodine (halogens: fluoride, bromine, iodine), a major component of thyroid hormone. Chlorine, however, is lighter and more chemically active than iodine. Chlorine has a greater affinity to bind to atoms than iodine, thus interfering with iodine metabolism in the thyroid by replacing a more weakly bound iodide with a more strongly bound chloride ion. While I believe swimming to be one of the healthiest full body exercises, in your case, swimming may have been an additional catalyst distorting optimal thyroid hormone production."

Tears were starting to stream from Laura's eyes. She was blown away by Dr. Oreg's thoroughness, patience and caring. She was virtually speechless as her intensity rose with every aspect of his analysis. No doctor had ever taken the time to educate her on the various manifestations involved in thyroid health. It was obvious that Laura was purging her emotions from years of frustration, anguish and ignorance about her condition. Her thoughts were racing. "How could someone who had been so vital, energetic and fit plummet into such a funk at a relatively young age? Could Dr. Oreg's explanations be a key? Will his recommendations finally bring an end to my suffering?"

Dr. Oreg continued, "now let's see, what risk factors could you possibly have that would cause you to be hypercortisolemic? You have an executive-level, stressful job, you are super competitive, you commute into New York City every day, you have a husband and three sons, you have a house and you are a woman (*Cortisol/ACTH ratios were significantly higher in females than in males*<sup>8</sup>). Outside of that, you have a stress-free life!"

Excessive stress," explained Dr. Oreg, "could be indicative as to why you are feeling the way you do, plus it can significantly alter normal physiological expression. What we need to discover are the mechanisms that we need to employ to get you feeling the way a 38- year-old woman should feel.

"First I'd like to explore any possible role that food sensitivities may play in this entire realm."

"Food sensitivity?" queried Laura.

"Food sensitivities are delayed reactions, or IGG immune reactions, to particular foods. Contrary to an allergy which may produce an immediate reaction, a sensitivity may take two or three days to manifest. It's usually a food, food group or food additive which is often abundantly consumed. I'd recommend an IGG food sensitivity test which requires a blood draw. Your blood is sent to a dedicated immunological laboratory that will test the presence of IGG antibodies in the response to an exposure to about 100 food allergens. The premise is that

high circulating IGG antibodies are associated with food intolerances which may cause or exacerbate disequilibrium.

Meanwhile, we can do some testing in the office for suspected sensitivities." Dr. Oreg explained the concept of muscle response testing and how each element has a unique vibration. "When these elements are in disharmony with our own vibrations, that substance will affect the body's energetics, causing you to be unable to resist my gentle downward pressure. Those foods that manifest a weak response are those that are considered probable sensitivities."

After in-office testing, Dr. Oreg advised Laura that it is likely that she may be sensitive to gluten containing foods. This list includes: barley, rye, wheat and, to a lesser extent, oats. Dr. Oreg explained, "there is actually a great deal of research to demonstrate a connection between gluten intolerance and abnormal thyroid function. This means that individuals with a history of symptoms of poor thyroid function should automatically be considered as candidates for gluten elimination."

How come none of those doctors I'd been to recommended gluten elimination?

"Let me ask you this, have you ever had an electrician do any work in your house."

"Of course," Laura responded.

"Did you ever ask him, before you leave could you check my toilet?"

"Of course not," Laura emphatically replied.

"Why?"

"He's an electrician, not a plumber!"

"That's the same reason why you aren't going to get reliable nutritional information from a medical doctor," Dr. Oreg affirmed.

"Because he isn't a plumber?" Laura sarcastically retorted.

Dr. Oreg asked permission to clip a bit of hair from the nape of her neck for the purpose of ascertaining mineral balance and exposure to toxic metals. Being that hair dye and chemical hair treatments can distort the results, Dr. Oreg asked Laura if her hair was dyed. She responded that she hadn't dyed her hair since college and her lack of gray hair was a positive genetic trait that she received from her mother, whose gray hair didn't start sprouting until she was in her late 50s. After carefully snipping and weighing the appropriate amount of Laura's hair, Dr. Oreg proclaimed, "we'll get the results in about two weeks."

Additionally, an antibody test kit, to determine food sensitivities, was handed to Laura with instructions to visit Dr. Victor Steinberg, a colleague of Dr. Oreg's. It was arranged that the phlebotomist in Dr. Steinberg's office was waiting for Laura and would deposit the samples and ship them overnight to a functional laboratory in North Carolina. Dr. Oreg explained, "while I suspect gluten is most likely an issue, it is only an educated guess at this point. A blood test is the gold standard and will not only confirm or deny my suspicion, it will also determine any additional foods that may present an immune reaction."

Before leaving, Dr. Oreg administered two in-office adrenal function tests, which demonstrated a degree of adrenal stress. "We could suggest a circadian cortisol test, but it would probably just confirm my assumption." Dr. Oreg recommended a custom herbal adaptogen formula containing ashwagandha, eleuthero, schisandra, holy basil and fresh oat. "Adaptogens," Dr. Oreg explained, "are incredible natural compounds that help the body adapt to stress and support normal metabolic functions. The intention was to modulate her overt reactions and up-regulate her resistance to physical, biological, emotional and environmental stressors." While not an adaptogen, fresh oat, a tonic for the nervous system, had been added to the formula to balance Laura's mood, calm her shattered nerves and restore a sense of peace and tranquility. 10

Laura left with a low glycemic diet plan, gluten-free guidelines, a custom herbal formula, a multi-mineral supplement, an iodine supplement from Standard Process, a container of green superfood, a recommendation to eat two Brazil nuts per day, orders to triple her omega-3 consumption, an appointment card to return in two weeks, a little less hair and high expectations for remediation. By the time of Laura's follow-up appointment, Dr. Oreg would have the results of the food sensitivity test and her hair mineral analysis.

Laura exuberantly left Dr. Oreg's office and immediately dialed Irv's office. "Irv, I'm on my way home and I'm really excited, finally a doctor who listens to me and believes that I can get well."

"You just left?" exclaimed Irv.

"He spent nearly two hours with me and I'm confident that his suggestions are going to catapult me back into feeling the way I expect to feel. I can't wait for you to get home so I can tell you all about my session with him. By the way, Irv, I hope you're energized because you and I have to go shopping. I have a prescription grocery list."

The results of the hair mineral analysis arrived within two weeks after Laura's initial appointment. "Laura, this is Kathleen in Dr. Oreg's office, I want to let you know that we've received your test results." Kathleen set up an appointment for Laura the following Wednesday at 9:30 a.m.

Laura precisely followed Dr. Oreg's orders and within the first week had a sense of vitality, vigor and enthusiasm that had escaped her for years. She had lost six pounds that first week and four the next. Laura's noticed a feeling of inner cleanliness. Her breathing was unobstructed, her mind as sharp as when she had attended graduate school at Princeton, her energy had improved significantly and getting out of bed in the morning wasn't as much of a monumental triumph as it had been over the last couple of years.

The Saturday evening before her appointment with Dr. Oreg, Laura and Irv had dinner plans with there closest friends, Garry and Sheila Betharon who hadn't seen Laura in a couple months. They were startled at how radiant Laura appeared. "Laura, you look fabulous," remarked Garry, a respected plastic surgeon. "If I didn't know better, I would have sworn that you had some work done."

Laura smartly replied, "I had actually considered asking you to perform cosmetic surgery on me until I noticed that your office walls were full of portraits by Picasso." Laura proceeded to explain the horrors she had experienced over the last couple of months culminating with the exciting news about Dr. Oreg. "This is the new and improved Laura Marx," Laura proudly announced. "I'm on my way back."

Laura and Sheila had became roommates in their sophomore year at Cornell and have been best friends every since then. Being in regular contact, Sheila was intimately aware of Laura's health concerns and the frustrations she had experienced with arrogant doctors who shunned her cries for help. "I'm thrilled that you finally found someone who is compassionate and he seems to be very competent."

On the day of Laura's follow-up visit, Dr. Oreg had prepared a comprehensive 80-page report which had been personalized for Laura. The report was tabbed with sections on assessment, specific condition information, dietary guidelines, gluten-free recipes, supplement recommendations and references that Laura could perform her own research.

"So how are you feeling?" inquired Dr. Oreg when Laura entered his office.

"I love you," remarked Laura. "Not only do I feel phenomenal, but my friends and colleagues at work have noticed a positive change in my demeanor and appearance. My energy has returned, my mind is clearer, my ability to concentrate has returned, I'm less irritable and I haven't had any anxiety or bad dreams in more than a week. While I'm not 100% yet, the difference is unbelievable. You are a miracle worker. Could it be possible that all this time I've been allergic to gluten or is it that custom voodoo herbal formula you created for me?"

Dr. Oreg laughed hysterically at Laura's wit. "I did caste a spell over the herbs before I gave them to you; that's my secret weapon. Seriously, however, it's not you're allergic to gluten, your diet was so richly laden in wheat, rye and other processed grains that you had developed an over sensitivity to it. For reason that we don't fully understand, to many people gluten is a source of continued immune system sensitivity. This sensitivity can be relatively mild, whereas subtle progressive symptoms may emerge or the sensitivity can be so severe that the symptoms are completely debilitating causing a considerable impairment in the quality of life. Your sensitivity, in my opinion, was somewhere in between. This problem is more widespread than doctors acknowledge. If I did nothing else in my practice than to take patients office gluten, 65 to 70% of my patients would report a significant increase in energy, better concentration, less forgetfulness, better digestion, less congestion and an enhanced mood. You will notice, not only an improvement in your symptoms, but in six more weeks when we check your thyroid labs. We'll detect an improvement in your T4 to T3 conversion."

"Now, in response to the results of your hair mineral analysis and food sensitivity panel, it is abundantly clear that, in fact, you are gluten sensitive. As you can see from the summary page, the foods are divided into two groups, those foods that were non-reactive and those that were reactive. Those that were reactive are given values from one to four based on the level of reactivity, with four being most reactive. The higher the number, the more antibodies that were generated and we can surmise that they should be limited or avoided completely based on their level. From your test, you can see that wheat, rye and barley are all given a value of three. Additionally, dairy, peanuts, soy and corn are all given a value of two and almonds are given a value of one. I'd recommend complete elimination of all gluten-containing foods for the next six months, limit your dairy to two portions a week and almonds to a small handful every three or four days."

In reviewing the results of the hair mineral analysis, Dr. Oreg pointed out that Laura was relatively low in magnesium, selenium, potassium, zinc and molybdenum, with slight elevations in copper and cadmium. Additionally, Laura's level of both calcium and magnesium were significantly higher than her levels of sodium and potassium, substantiating Dr. Oreg's initial supposition of the adrenals being at least a co-factor. "In addition to the protocol I'd given you after our first visit, I'm going to add 25 mg of a zinc chelate and 100 mcg of molybdenum. I'm also adding 2,000 iu of vitamin D and a supplement with 1000 mcg of vitamin B-12 and 800 iu of folic acid.

Dr. Oreg explained that copper, an essential mineral supporting iron metabolism may also be problematic when it is out of balance with zinc. This imbalance may be an exacerbating factor in increased anxiety, depression, sleeplessness and joint and muscle pain. Zinc, being an antagonist to copper will, like a see saw, reverse this imbalance. Molybdenum, being an inhibiting factor in copper metabolism, will be an additional adjunct to creating optimum mineral balance. The mineral supplement which has a one-to-one relationship between calcium

and magnesium was intended to address the suspected magnesium imbalance, while the adaptogen formula would continue to attenuate her overstressed adrenals, easing her excitation.

Laura was given a comprehensive blood chemistry request by Dr. Oreg. "Stay on the prescribed program for the next four months and let's get another blood chemistry and compare the profiles. Meanwhile, the amelioration of your symptoms is a much better prognosticator of wellness than the laboratory numbers. If you continue to improve, as I suspect you will, your numbers will fall nicely into place."

Dr. Oreg suggested several biofeedback sessions where he integrates neurolinguistic programming, neurocardiology, heart rate variability and life coaching. The intention is to enable Laura to develop self-efficacy and the ability to transform errant emotional states into a desirable high coherent state.

Laura was elated. For the first time in over two years she was feeling good and had high expectations of progressing to the level she had achieved as an elite athlete. She had a bounce in her step that she had nearly forgotten about. "I feel like screaming that there is hope for those of us with undiagnosed thyroid disorders. Don't believe your medical doctors when they tell you that nothing's wrong. There's an answer and nobody needs to suffer needlessly."

Laura had her life back and Irv was thrilled that he no longer was going to be jolted from a deep sleep at 4:00 a.m. in the morning.

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