

MOLD, TOXINS, AND CHEMICALS: What Are They Doing to Us and What Can We Do About Them?

DR. RICK SPONAUGLE

Dr. Sponaugle is an integrative doctor who practices environmental medicine. His offices are in Florida, where he runs the Sponaugle Wellness Institute. He has dedicated his life to understanding brain chemistry and the effects of toxicity on the brain. He believes that one of the biggest culprits negatively affecting our health today is mold toxicity. Those of you who have suffered from some of the ill effects of mold exposure know that it can be devastating to your life. It is reassuring for many, after going from doctor to doctor, to know that there is a physician who understands toxins and how to rid the body of these damaging substances. There is not a single living person or thing on the planet not affected by toxicity. That is the sad truth, but the chemicals are here to stay so we must learn to live and thrive in spite of them or as a species we will not survive. I believe you will find his interview enlightening and hopeful.

SS: Thank you for your time, Dr. Sponaugle. Environmental medicine has emerged recently; why is there a need for it?

RS: So nice to speak with you, Suzanne. Environmental medicine has emerged as a new medical specialty because, at last count, American industry has manufactured more than eighty-one thousand synthetic chemicals since 1930. We are exposed to these toxic chemicals on a daily basis. In your book *Sexy Forever*, you did a splendid job of exposing the myriad of toxins American industry has placed in our food supply and water supply.

SS: Let me play devil's advocate. Why should we care?

RS: The majority of these industrial chemicals are fatty in nature, called *lipophilic*. Every cell in our body has a fatty membrane, kind of like the outer shell of each cell. These membranes are made up primarily of omega-3 and omega-6 fats, the good fatty acids; these good fatty acids make up the cell membranes of brain, heart, liver, muscle, and skin cells.

What is problematic is that these industrial toxins—benzene, toluene, pesticides, food additives and xenoestrogens like BPA, PCB, and phthalates, to name a just a few—being lipophilic or fatty in nature, freely move through the fatty membranes of the body's cells migrating to and depositing in the fattiest body tissue. Because our brain is the fattiest organ in the body, consisting of some 60 percent fat, every decade an ever-increasing number of Americans are suffering from neurotoxicity—the excessive accumulation of environmental toxins in the brain.

These fatty toxins actually move into the linkage between omega-3 and -6 fatty acids, causing our brain cell membranes to become stiff and less compliant; this in turn disallows fluid movement of our brain's messengers, brain chemicals like dopamine and serotonin, to effectively travel between brain cells. Furthermore, the brain chemical transporters residing in cell membranes become “too toxic” to properly transport brain chemicals from one brain cell to the next.

SS: So the harmful fatty acids make a membrane that is not fluid, more like an eggshell and too sick to move brain chemicals between brain cells? And what is all this “*in-toxication*” doing to us? It certainly can't be good.

RS: Oh, Suzanne, it's extremely problematic. In my opinion, neurotoxicity is the primary cause of the threefold increase since 1980 in depression, anxiety, insomnia, chronic fatigue, and fibromyalgia.

Let's give your readers a great visual that explains in just one brain region, the nucleus accumbens, how neurotoxicity causes both depression and obesity. The first slide depicts the nucleus accumbens, our hunger and reward center. The second slide depicts two brain cells inside of the nucleus accumbens.

It is the activation of the D2 receptor in our nucleus accumbens that gives us pleasure and satiety; this negates our need to overeat. PET brain studies have proven that eating triples D2 activity in our hunger center for ninety minutes. Think about this, Suzanne; every extra bite of food gives our reward center another "dopamine hit."

Neurotoxic patients suffer diminished release of dopamine and thus decreased D2 activity. This not only causes symptoms of depression, it causes a lack of "satiety," so they eat something every hour and a half or so as an attempt to self-medicate. They often say, "I'm eating out of boredom"—boredom and lack of motivation are symptoms derived from an underactive reward-hunger center.

SS: I wrote about our "toxic burdens" in *Sexy Forever*, stating that the more toxins you take in, the more fat is needed for storage. People are perplexed when they can't lose weight by dieting alone. Eating foods laden with chemicals and preservatives is going to stall your ability to lose weight, is it not?

RS: Absolutely. And asking that is two great questions in one. First, obese people carry more fatty toxins than nonobese people because fatty toxins deposit in fat. The heavier toxic load

diminishes brain function in obese people. A recent brain imaging study revealed that the brains of obese patients are smaller than the brains of normal weight individuals.

Let me further explain the domino effect regarding the role of toxicity as a primary causation in America's battle with obesity. Dopamine receptivity, the ability of the dopamine molecule to fit and activate the D2 receptor, is controlled by two hormones, thyroid and testosterone.

Neurotoxic patients suffer deficiencies of testosterone and thyroid hormone. The brain's hypothalamus becomes "too sick" to properly stimulate the pituitary gland, which is responsible for activating the thyroid gland and our sex organs. Thus, neurotoxin-induced deficiencies of thyroid and testosterone cause further depression and more overeating.

Neurotoxin-induced suppression of TSH, thyroid-stimulating hormone, and the subsequent hypothyroidism, causes obesity through yet another mechanism. Suzanne, as you are well aware, our thyroid hormone controls the metabolism of every cell in our body. When the body's metabolism is shut down by 50 percent, there is no way to avoid excessive weight gain.

I have successfully treated thousands of obese patients who suffered undiagnosed neurotoxicity. Most had previously spent thousands of dollars at weight loss clinics and wellness centers where the neurotoxicity factor was ignored. Some of these women suffered such severe hypothyroidism that their basal temperature was down to 96 degrees; normal is 98 degrees. If you see a woman sitting in a restaurant wearing a jacket or sweatshirt in a 72-degree room, it's likely hypothyroidism. These patients can eat two lima beans a day and still not lose weight until we remove the toxic load from their brains and bodies.

SS: How do these toxins get into our bodies?

RS: Well, as you pointed out in *Sexy Forever*, we absorb them through our skin while taking showers and using products that contain them, and through our intestinal lining because our food is contaminated with ridiculous toxins to make it look “more fresh” in the supermarket; this nonsense is responsible, in addition to poisonous pesticides.

Progress has moved us into an era of airtight energy-efficient homes that are slowly killing us because they don't breathe. In modern homes, we are actually breathing in many aromatic solvent toxins like benzene and toluene on a daily basis. These toxins are ubiquitous and they outgas from carpet glue, indoor paints, and furniture fabric, including “flame-retardant” mattresses that we sleep on for hours every day. Wool is a natural flame retardant, but “progress” has taken us away from the common sense of our ancestors who used wool instead of chemical-laden bedding.

Toxicity is really about the cumulative effect of toxins. My experience has been that our liver does an amazing job of handling the myriad industrial and environmental toxins in most people until they develop mold toxicity from water-damaged buildings. Mold toxicity is slowly killing millions of Americans.

SS: So tell me about the HLA gene you diagnosed me with and what the deal is with mold toxicity? Who carries the HLA gene? How do you test for it?

RS: Well, Suzanne, you and I both have the HLA-DRBQ gene. The test for HLA-DRBQ genes is a DNA blood test. People like us with HLA-DRBQ genetic makeups cannot make antibodies to mold toxins. Hence we cannot effectively remove these toxins from our body like other people. It's not a problem unless we're living or working in a water-damaged building.

The highest prevalence of this genetic anomaly is in fair-skinned people of Northern European descent, particularly English, Irish, and Welsh. Supposedly, only one out of four Americans have HLA-DRBQ gene pools, but ironically 85 percent of my patients have the genetics that predispose them to mold toxicity.

Most American physicians are naive regarding mold toxicity because mold toxicity is an emerging illness; it was much less common just fifty years ago. It wasn't until the 1970s that we began producing more air-tight energy-efficient homes and office buildings. God gave us logs and stone; mold grows slowly on these, but it flourishes on wet drywall, which is essentially pressed paper. Prior to 1970, the majority of our walls were made from plaster and plywood.

When buildings suffer water damage, molds grow quickly on cellulose material like drywall; billions of toxin-producing mold colonies become trillions of colonies in just days. Two phenomena, the advent of drywall and the production of energy-efficient homes, have caused a rapid rise in the number of Americans suffering from mold toxicity. Americans with HLA-DRBQ genetics who live or work in water-damaged buildings are essentially living in toxic gas chambers.

Mold toxicity has been linked to a multitude of medical disorders. Apparently, I have performed the only research in America comparing the brain scans of mold-toxic patients to toxin-induced changes in brain chemistry. My research has proven that mold-toxic brains produce excessive levels of two electrifying brain chemicals, glutamate and phenylethylamine. Mold-toxic patients frequently suffer symptoms of chronic fatigue and fibromyalgia.

A multitude of mold-toxic patients become addicted to drugs like OxyContin and Xanax in their attempt to calm their overelectrified brain and body. America's rehab centers are full of addicted patients where rehab doctors and counselors misdiagnose these patients as drug addicts.

SS: How does excessive toxicity set you up for disease from the perspective of the average person in America?

RS: Wow, it's multifaceted. But I will attempt to cover some pertinent concepts that every American should be aware of.

Toxic patients suffer global hormonal deficiencies derived from neurotoxin-induced shutdown of the pituitary gland, called *pituitary insufficiency*. Suzanne, as you know, the pituitary gland produces a multitude of hormones, some that directly target end organs like growth hormone and others that stimulate production of hormones in downstream glands—the thyroid, adrenal glands, and the gonads, testicles, and ovaries.

These multiple hormonal deficiencies cause diminished function within every cell of the body, leaving patients with symptoms of depression, chronic fatigue, lethargy, brain fog, MCI [mild cognitive impairment], early onset dementia and Alzheimer's, insulin resistance, metabolic syndrome, and the list goes on beyond what we can discuss in this chapter.

Children up to thirteen years of age have immature livers as compared to adults; therefore, the younger the child, the more difficulty he or she has removing environmental toxins. Those who are neurotoxic from age two months until around age ten, the years in which most of the brain myelin is laid down, can actually develop smaller brains. Children who are neurotoxic in middle school often suffer delayed puberty and stunted growth from growth hormone deficiency. Adults

who suffer growth hormone deficiency lack the ability to repair cells in their bodies; therefore, they undergo an accelerated aging process.

Neurotoxic patients suffer from a deficiency of ADH, antidiuretic hormone. Children who suffer undiagnosed neurotoxicity often exhibit problems with enuresis, or bed wetting. For some reason, no one has picked up on the fact that their pituitary is shut down from toxic load. These are things you surmise only when you are paying attention to trends in your patients.

When adults suffer from toxin-induced ADH deficiency, they exhibit symptoms of frequent urination, normally getting up in the middle of the night versus wetting the bed. In middle-aged males, the knee-jerk assumption made by most physicians is that the patient suffers from an enlarged prostate, but this may or may not be the case. Physicians cannot flippantly make this diagnosis in female patients. Many females I have diagnosed with neurotoxicity informed me that their physicians told them to simply stop drinking so much water and they wouldn't have to go to the bathroom so often.

As we discussed earlier, neurotoxic patients cannot produce adequate thyroid-stimulating hormone and thus typically suffer symptoms of hypothyroidism. Because the thyroid hormone activates every cell in the brain and body, cellular metabolism and function is suboptimal throughout the body.

SS: What are the symptoms or indicators of low thyroid?

RS: Depression, lethargy, fatigue, brain fog, early dementia, cold hands, cold feet, general cold intolerance, heat intolerance, high blood pressure, bradycardia, which is a slow heart rate, syncope, constipation, myalgias, muscle cramping, stiff joints, coarse brittle hair, hair loss, slow growth of fingernails, slow wound healing, more frequent infections, and decreased perspiration.

SS: Why would decreased perspiration be a problem?

RS: The more severe the hypothyroidism, the less the patients sweat and poop. We eliminate fatty toxins through sweating and pooping. I always ask my patients about their bowel movements because the bowels tell me a lot about their health, particularly if I suspect they are neurotoxic. Sweating is essential for toxin removal; this is the reason infrared saunas are utilized in so many health spas. In modern America, nobody sweats in the way our ancestors did. Many of our great-grandparents would sweat all day because they physically worked twelve hours a day for survival on farms. Today Americans run from their air-conditioned homes to their air-conditioned cars to their air-conditioned offices. If they do work out, it's often in an air-conditioned gym that is so cold they can't sweat. How ridiculous progress has made us look. In the hypothyroid state, our mitochondria are so underactive and sluggish that they cannot effectively burn oxygen and glucose to make energy and heat.

SS: Is that why people with low thyroid feel like they are “out of gas”?

RS: Absolutely. Furthermore, in hypothyroidism, the waste products produced from what little oxygen and glucose is utilized cannot be effectively removed from the body cells. For lack of a better description, every cell in the body “blows up” with a mucopolysaccharide waste product called *mucin*. Mucin accumulation in skin cells causes a thickness above the eyes and between the eyebrows in people who really aren't even fat. Mucin accumulation from hypothyroidism can cause the lips and tongue to enlarge and produces a thickening of the skin. Hypothyroidism is so common in American women that many middle-aged women cannot lift the skin off the outside of their biceps.

SS: Yes, but couldn't all this be attributed to normal aging? You know, that gravity is pulling the face down. That in itself creates more hooding around the eyes. How do you differentiate?

RS: You differentiate thin, sagging skin from thick and puffy eyelids. Many middle-aged American women waste \$5,000 on blepharoplasty when all they need is to have their thyroid status optimized.

SS: Does the thyroid affect the immune system?

RS: Absolutely. Every cell in the body depends on T3, the active thyroid hormone, for mitochondrial activation, including our natural killer cells and our antibodies. In fact, it's interesting that Graz, Austria, is in the goiter belt where there is the least iodine in the soil, and therefore, before iodine supplementation in table salt, had the highest incidence of hypothyroidism in the world. Around the turn of the nineteenth century, before the advent of antibiotics, Graz had the highest death rate of newborn infants in the world—they all died of infections. Our immune system simply doesn't **work out** thyroid hormone. Of note, testosterone is required for activation of interleukin-6, the cytokine that activates our natural killer cells. Suzanne, it's all amazingly interconnected.

Neurotoxic patients can suffer severe deficiencies of the pituitary hormones, luteinizing hormone (LH) and follicle-stimulating hormone (FSH). This causes early andropause in men and early menopause in women. It is not unusual in my practice to see twenty- and thirty-year-old females who have already entered menopause. What a frightening thought that this is becoming the state of the union in America!

Suzanne, when I read *Sexy Forever*, I was reminded of a particular patient, and I know you're going to appreciate this story. I recently treated the twenty-seven-year-old daughter of an

academic physician from New York City. She had suffered with severe chronic fatigue and depression since age seventeen, the age at which she suddenly lost her menstrual periods.

None of her father's colleagues at NYU Medical Center could determine the causation of her physical and mental decline. They, of course, never considered neurotoxicity. Halfway through a family workshop I was conducting, I was discussing neurotoxin-induced hormonal suppression when this young lady stood up and informed me and the entire audience of forty strangers that many of her thirty-year-old girlfriends in New York City had already developed menopausal hormone levels and had become amenstrual. These young women were all prescribed toxic birth control pills by their New York gynecologists.

Sadly, American gynecologists readily examine the uterus and perform laparoscopies to evaluate the ovaries, but, they remain naive regarding neurotoxicity. We've got to get the word out. Doctors simply fail to realize the problem is that the switch, the brain, is broken, not the end organ, the ovaries.

Neurotoxicity in young females often results in infertility issues. I have treated many middle-aged females who unfortunately spent \$50,000 on unsuccessful infertility treatment before they found the institute. After these young women were properly diagnosed and underwent my intravenous detoxification program, they had no problem getting pregnant and no longer suffered miscarriages.

Toxin-induced testosterone deficiency can cause insulin resistance and diabetes in both sexes; insulin requires optimal testosterone levels for receptivity. I find it interesting that in 1982 when I graduated from medical school, the average age of adult-onset diabetes was around fifty. Thirty

years later, we are seeing younger and younger patients in their thirties and forties develop type 2 diabetes; this is because of the higher level of toxic exposure with each new decade.

Neurotoxicity is the common denominator in the majority of Americans who suffer with chronic fatigue and fibromyalgia. When the neurotoxic brain is too sick to respond to falling hormone production from downstream organs, patients suffer hypothyroidism, adrenal insufficiency [cortisol and DHEA deficiency], and testosterone deficiency.

Adrenaline, noradrenaline, and dopamine are first cousins in the catecholamine family. These neurotransmitters require thyroid hormone, cortisol, and testosterone to activate their respective receptors throughout the brain and the body. Inadequate activation of these three neurotransmitters causes severe chronic fatigue. Chronic fatigue is diagnosed by traditional medical doctors and doctors at most progressive antiaging wellness centers as a primary adrenal problem, when in fact, this is rarely the case. The adrenal glands are usually fine; the more common problem in Americans is that neurotoxicity is shutting down pituitary stimulation of the adrenal glands.

Suzanne, I see chronic fatigue and fibromyalgia as codisorders in all my neurotoxic patients. This is because an excessive accumulation of brain toxins also causes excessive production of the brain chemical glutamate. Glutamate is the most powerful excitatory or electrifying brain neurotransmitter. For this reason, neurotoxic patients experience excessive “electrical voltage” for want of a better phrase, throughout their body; this is the primary cause of their fibromyalgia symptoms.

DHEA deficiency in neurotoxic patients can be another cause of fibromyalgia. The toxic brain is again too sick to stimulate adrenal production of DHEA. Both DHEA and MSH, a pituitary

hormone, are both required for the production of our natural opiates, endorphins; obviously indoors and deficiency will precipitate increased total body pain.

When fibromyalgia patients undergo my intravenous detoxification program in addition to proper optimization of their calming brain chemicals and the hormones that control the receptivity of those brain chemicals, they no longer suffer fibromyalgia symptoms. We have phenomenal success treating fibromyalgia patients.

SS: How does cellular damage from toxins affect our bodies?

RS: Since the structural integrity of every cell membrane and body is made up of a good fatty acids omega-3 and omega-6, the infiltration of fatty toxins into the cell membranes can destroy every organ in the body.

The intestinal lining is extremely sensitive to toxicity, and excessive toxicity causes malabsorption and multiple nutritional deficiencies. Every year I see more and more younger Americans suffering from toxicity and malnutrition. All the fatty toxins, including pesticides, destroy the intestinal lining, but the most damaging toxin I have seen to the intestinal mucosa is the trichothecene T2 toxin produced by the black mold *Stachybotrys*. The best research on this is out of France and Germany; for some reason American medical centers, with the exception of Michigan State and Texas Tech, remain fairly naive regarding mold toxicity. Neurotoxicity is the excessive accumulation of toxins in the brain. The brain and peripheral nervous system are the most sensitive organs to the toxic load of fatty toxins. Earlier we discussed the concept that the brain is the fattiest organ, consisting of 60 percent fat. The myelin sheath, the insulation on brain and body nerves, is actually 80 percent fatty in structure and is extremely sensitive to fatty toxin infiltration.

For this reason, fatty toxins are particularly damaging to myelin. When they deposit in the myelin sheath, they cause excessive inflammation; and, ultimately, they can cause total destruction of the myelin sheath as seen with multiple sclerosis. Suzanne, the scary thing is I see approximately forty new patients every month, and lately I am diagnosing at least two middle-aged females every month, via MRI of the brain, with multiple sclerosis.

These women always have HLA-DRBQ genetics in which they cannot effectively remove mold toxins from their brain, and they always suffer from undiagnosed mold toxicity. We can typically reverse earlier stages of multiple sclerosis with twelve weeks of our Brain Wellness Program, which includes our aggressive intravenous program for removal of toxins. We have not found oral medicinal or herbal detoxifying agents to be effective in treating these MS patients.

SS: So if people don't clear out the toxicity in their bodies, what can they expect?

RS: Essentially, some level of decline in every organ and every system of the body. Patients suffering excessive toxicity will also undergo an accelerated aging process. Every patient suffering neurodegenerative disorders—Alzheimer's, multiple sclerosis, ALS, Parkinson's, and autism—whom we have treated at Sponaugle Wellness Institute has proven to have HLA-DRBQ genetics and undiagnosed mold toxicity. Again, the mold toxicity tends to overwhelm the liver, thereby exacerbating the patient's generalized toxicity from pesticides and industrial toxins.

While we can't measure all eighty-one thousand sympathetic toxic chemicals manufactured by American industry since 1930, we do measure an average of ten aromatic solvent toxins in all our patients; this gives us a general assessment regarding the level of our patient's overall toxic state. The pattern we see is that the bigger the city, the more toxic the patient.

SS: If we are living in big cities, what can we do? How can we fix it? Is the only thing a person can do is go to your clinic and detox? And then when they get back from your clinic, they will be exposed to the environmental toxins and then are they going to get reintoxicated?

RS: Once we have brought patients' toxin levels down, they need to do many of the things you have already recommended in your previous books. Everyone should install reverse osmosis filters to remove antibiotics and heavy metals from their drinking water. However, reverse osmosis does not filter the fatty toxins in city water; these require placing a charcoal filtration system in the home water system. We can actually absorb more fatty toxins through the skin while taking a bath or a shower than we can ingest drinking city water.

SS: Well, how can we survive? You are talking about pretty much everyone. We are all exposed to some form of toxic chemicals.

RS: I advise all my patients, particularly those with HLA genetics, to invest in a charcoal filtration system for their home. It is also very important to exercise and sweat on a daily basis. Patients who have physical disabilities and cannot exercise should definitely use infrared sauna several times a week.

It's also important, as you have emphasized in your books, to invest in organic foods. You made the point prior that organic food can be expensive, but it is more expensive to suffer cancer and other medical disorders from pesticide toxicity.

I personally think every American should be tested for HLA-DRBQ genetics. Knowledge is truly empowering; patients need to know if they have to practice hypervigilance regarding their living or working in mold-toxic buildings.

Americans are living in cities where the water supply is tainted with antibiotics that destroy the normal and beneficial bacteria in our gastrointestinal system; subsequently many Americans have developed intestinal overgrowth of toxic yeast and pathogenic bacteria. A recent study from California Tech emphasized the concept that deleterious yeast mycotoxins and bacterial endotoxins from gut toxicity are causative in multiple sclerosis. This is something your friend Brenda Watson and I have discussed for years, and we have been waiting for the validation from a university medical center.

This study validates the fact that Americans should take gastrointestinal dysbiosis and gut toxicity seriously and use all natural herbal products such as Renew Life CandiGONE to rid their intestine of parasitic microorganisms.

Some cities are more toxic than others depending upon their industrial history. We tend to diagnose more aromatic solvent toxicity in patients from Newark, Chicago, Pittsburgh, and Cleveland.

SS: So the babies born in these cities are born toxic because the mothers are contaminated with mold and toxins, and then the city itself further contaminates the child. There are other places in America that are extremely toxic. Some regions in West Virginia and Ohio have been nicknamed “cancer valley” because of the increased prevalence of cancer from toxins produced by major chemical companies.

SS: But let’s go back to what we can control. What goes on in our houses should be within our grasp. But the problem with mold toxicity is that most of the time we can’t see that we have a leak in our houses.

RS: Suzanne, you’re absolutely right.

Lauren, a forty-year-old woman came to me recently for help with what she thought was mold toxicity after finding my website. Her water bill had increased fourfold over the last six months and she had gained forty pounds in that sixth-month period. She also developed a new-onset insomnia disorder. She knew she had a water leak hidden behind a wall or under a floor, but she couldn't find it. Her three children who always made straight A's suddenly started making C's. I diagnosed Lauren and her children with HLA genetics and severe mold toxicity. Lauren and her children responded extremely well to just two weeks of our intravenous mold toxicity program. Had they not found us, the next thing the kids would have developed would be food allergies . . .

SS: Why food allergies?

RS: Food allergies and leaky gut syndrome are an integral part of the toxicity syndrome. Fatty toxins like pesticides and mold toxins destroy the gut lining overtime. One of my twenty-six-year-old patients from Chicago, Sarah—she and her father have a video testimony on my website—developed coordination and balance problems in addition to fine motor issues that made handwriting difficult. She was losing her fine motor function at the young age of twenty-six.

SS: Why?

RS: Because she acquired severe trichothecene toxicity from working in a moldy greenhouse. She developed such severe leaky gut syndrome that her excessive leaking of the gliadin protein produced excessive antigliadin antibodies. The problem is that gliadin mimics or looks like the purkinje cells in the cerebellum. In these patients, the immune system, specifically the antigliadin antibodies, attack and destroy the cerebellum, causing coordination issues and ataxia. This

mechanism is prevalent in many autistic spectrum disorders, but no one appears to be looking for mold toxicity in these children.

SS: It's amazing that mold toxins are so destructive.

RS: I know, Suzanne. I am still amazed, and it seems each month, we add to the list of medical disorders that are caused by mold toxicity.

SS: Who do you call to get mold out of your house?

RS: We now use a company called Bio-Science. They have a national presence and have treated the homes of our patients from California to Boston. Their natural enzymes not only kill the mold spores, but more importantly, they break down the toxic gases produced by indoor molds.

SS: Now we know that mold is pervasive and that it is making us sick. What is your protocol?

RS: My toxicity protocol is very comprehensive. It includes an extensive evaluation of more than three hundred biochemicals, including biomarkers for various toxins and the immune system. We optimize hundreds of brain chemicals, hormones, and nutritional factors using both oral and intravenous modalities. All the while, we are simultaneously performing aggressive removal of toxins with our intravenous protocol.

Mold toxins, particularly the trichothecene mold toxin, suppress multiple components of the immune system. Therefore, mold-toxic patients often have additional toxicity from intracellular brain infections; typically mold-toxic patients also suffer with Lyme disease and *Mycoplasma* infections. We use an all-natural protocol of megadose intravenous vitamin C and other herbal medications to boost the kill power of the immune system. We avoid antibiotics at all costs in

these mold-toxic patients because antibiotics rarely have effective kill power in patients with toxin-induced immune suppression.

SS: Do you ever use pharmaceuticals?

RS: When we have to, but rarely. However, our practice of integrative medicine is just that, the integration of Western medicine with natural medicine. Mold-toxic patients and patients who suffer neurotoxicity from other environmental toxins like benzene often suffer with severe panic disorder. In these patients, we will temporarily use pharmaceutical medications to control their anxiety and panic until we can remove enough toxicity to quiet their overelectrified brain. If they come to us on antipsychotic medications, our goal is to have them off these medications within a two- to three-week period.

We have successfully treated over four hundred patients who were previously diagnosed with bipolar disorder and prescribed various antipsychotic medications before they came to Sponaugle Wellness Institute. Every one of these patients suffered undiagnosed mold toxicity and when we effectively treated their mold toxicity, these patients no longer needed their antipsychotic medications.

SS: Clearly, as I've said before, we are under the greatest environmental assault in the history of humankind. Is there hope? Can we get on top of it?

RS: Well, yes, we can to some extent. I would suggest that you are one of the best living examples of "getting on top of it" in America. I am living proof as are many of my patients. What we can't afford to do is take the ostrich approach and bury our heads in the sand. Our goal is to perform aggressive detoxification, bringing our patients' toxicity levels down and giving

them a clean slate, after which we empower them with knowledge regarding toxicity as you have done for years in your previous books.

My wife, Kimberly, is taking it to the next level. She is currently working on opening a plantation in southern Georgia called South Eden. There, our patients and others with an interest will learn how to perform sustainable living and eco-sensitive green gardening. They will learn how to grow their own organic gardens in a multitiered fashion that will produce enough organic fruits and vegetables to feed a family of five in a relatively small space, even on a balcony patio in downtown Chicago.

My program will effectively detoxify, and her program, which I believe you will find much more exciting than mine, will teach patients how to prevent the “retox.”

SS: Thank you, Rick, for sharing this important information with my readers.