Get Rid of Anxiety, Depression, Bipolar Disorder or Psychosis NOW Using These Tools Instead of Meds

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# Table of Contents

Introduction ........................................................................... 3
Nutritional Treatment for Psychiatric Disorders ...................... 10
The Diet Dragon .................................................................... 20
Thyroid Disaster .................................................................. 26
Hormone Cacophony .......................................................... 37
Epilogue ............................................................................... 43
Introduction

I have never let my schooling interfere with my education.
Mark Twain

Some of us feel pretty alienated from the world of the industrial medical complex and mainstream pharmaco-therapeutics.

What crossed my mind when I heard that the mother of an autistic boy had shot her son and then herself, was to wonder what anti-depressant she had been taking. Increasing suicidality and homicidality are significant side effects of anti-depressant use. It is a factor closely associated with many well known murder/suicide scenarios (http://ssristories.com/index.php). It is an inconvenient truth, one that pharmaceutical firms have done their best to whitewash.

Dr. Margaret Fern Jensvold had been a physician, a psychiatrist. Ah, I reflected, she had not found her way…. Most doctors don’t. They remain mired in the mainstream medical world of fuzzy causality and the pharmaceutical treatment of symptoms. It is a world of no solutions, dead ends and the trade-off of clinical integrity for membership in an elite group. They continue in the arrogant belief that mainstream theory and therapeutics is all there is to know about healing.
Medical doctors are part of a very prestigious community, but they get horrible diseases and die premature, grisly deaths. Case in point, Dr. Margaret.

**What Sprang Me Loose From the Mainstream**

Early in my medical career at a routine GYN visit, I was told that I had a mass in my right ovary and needed surgery.

**What?!** I thought, and undoubtedly said. Laparoscopic surgery was not offered as an option. At the time, I lived alone, ran my own medical practice, and was my sole financial support. There was no way I could, or would, put myself in dry dock for gynecologic surgery. I was very familiar with hospitals and their routines. I did not have any romantic notions about what this experience was going to be. I would be a huge chunk of meat on a slab, one of many that got 'processed' through the OR every day.

I run high anxiety on an average day. This event would trigger absurd levels. I would be spring loaded. It would be difficult for the hospital staff to understand me, and for me to identify with their perspectives. It would be an interpersonal disaster.
I was having no symptoms whatever from this mass. Couldn't we slow this down a bit and get some idea of a diagnosis without a major, life-disrupting event? Apparently we could not, in the opinion of the professional with whom I spoke.

The usual pressure was being applied. The C word was being liberally invoked. I would have had to be a lot more scared of cancer than I was of surgery or of going into a huge financial hole to have that influence me. I would have had to know nothing about pathology or any of the other things that I had studied in medical school.

I figured that if I had cancer, I should be sick. I never did believe the 'silent killer' propaganda. I had interviewed lots of patients with cancer. They were sick. They had been having symptoms for years. Either they, or their doctor, or both, had been ignoring them.

There were three terribly lonely years after that while I watched what evolved and thought about what to do. I spoke to no one, because I knew if I said one word to anybody -- parents, friends, colleagues -- the pressure would be on again. I was concerned, but I was also strong willed. My medical degree had to mean something.
I immediately researched the possibilities for right lower quadrant masses. I read about the common tumors, and the more grisly rare ones. It could be anything, but it probably wasn't. It was probably some ordinary, garden variety mass.

I researched the percentage chances for each of these. I did have some background in the human body, and I certainly had final say over what was going to happen to me.

I would not have chosen mainstream treatment even if I did have a tumor that would spread. I stayed silent until I knew that if the mass had been cancer, I would have been dead already. That was it. From the information I had gathered and the symptom complex as it evolved, the diagnosis was made. It was endometriosis.

So now I had a diagnosis, but I still had endometriosis. The mass was getting larger and more tender, no question about that. I had been taking the vitamins and herbs that I read were supposed to help. They had no impact.

I was starting to accept that I might have to calm down and choose surgery, when my mother came to visit. She handed me a book called *The Immune Power Diet* by Thomas Berger, MD. She often gave me books that she was curious about but did not have the time to read. I devoured them.
Berger claimed that there were seven foods that frequently provoked symptoms. These foods were wheat, corn, soy, sugar, dairy, eggs, and baker’s and brewer’s yeasts. He called them the ‘sinister seven’, and he listed the symptoms and disease states that these foods could cause in a sensitive individual.

The list was monumental. I was stunned. I had heard nothing about this in medical school or from mainstream therapeutics. The list included pre-menstrual syndrome, but not endometriosis. Never at a loss for clinical innovation, I reasoned that if these foods could cause all these other symptoms, perhaps they could cause endometriosis. I stopped eating them immediately. Within twenty four hours, the right lower quadrant pain that had been backing me into a corner was gone! GONE! -- the sword of Damocles that had hung over my head for three years! They really don’t know all there is to know about healing the body in mainstream medical circles….

What else don’t they know?

Now I was on fire. I researched on the Internet and took every course I heard about. I took courses in Functional Medicine, Orthomolecular Medicine and Psychiatry, Naturopathy, Chiropractics, Nutrition, Homeopathy, and Herbal and Energy Medicine. If it seemed at all rational to me, I studied it.
I met a lot of like-minded people along the way and learned that many people were discontent with mainstream therapeutics. I learned about the objective problems and conflicts of interest with which the industrial medical complex is riddled. I learned that mainstream medicine and all of its major journals are owned by the pharmaceutical industry, through its powerful lobbying, grants for research, funding chairs at universities, and the phenomenal amount of money it can afford to spend on advertising. Pharmaceutical firms charge extremely inflated prices for their products, no matter what they say about how much it costs to bring a new drug to market.

I have seen thoughtful people go through agony because they differed with their mainstream clinician. With or without medical background, I have seen parents make the wrong choice, vaccinate for example, and have their child descend into autism. I have stood by while friends and neighbors followed mainstream advice and developed autoimmune and inflammatory disorders. Once a patient has come to clarity about taking a position that differs from the mainstream recommendation, any interaction with a mainstream clinician can result in contention and assault.
So what happens now?

In the 'better to light a candle than curse the darkness' spirit, I am making this e-book available. *Get Rid of Anxiety, Depression, Bipolar Disorder or Psychosis NOW Using These Tools Instead of Meds* addresses fundamental areas in your biochemistry that produce psychiatric illness.

This is an e-book for any person who wants to take greater control of their mental health. Since no e book can possibly answer all of the questions that you may have, I make myself available every Tuesday evening on an Open Forum to answer your questions.

But, for now, just scroll down and keep reading…
Nutritional Treatment for Psychiatric Disorders

During the last third of the twentieth century, several groups were competing for dominance in the treatment of psychiatric disorders. For more than fifty years, psychoanalysis, developed by Sigmund Freud, had held that place. Now, however, the limits of early psychoanalysis had been reached. By the mid-1960s, behaviorists, cognitive psychologists, learning theorists, and proponents of pharmacologic therapies had come into prominence in respected academic settings.

Freud himself had predicted that biologic treatments would replace the 'talking cure,' and by the end of the twentieth century, psychopharmacology dominated the treatment of mental disorders.

Few academicians, professors of psychiatry at universities, knew that also during the 1960s, Abram Hoffer, MD, PhD, was conducting the first double-blind controlled studies of very high doses of niacin, vitamin B-3, for the treatment of psychotic thought disorder. Hoffer’s nutritional therapies were ignored, even though his cures were sometimes dramatic. Many patients with profound disorders experienced a degree of healing unheard of in mainstream practice, while generally avoiding the bizarre and often permanent side effects associated
with long term drug treatment. Many of them are listed here:
(http://www.prozactruth.com/prozactruth.com_index.html/Prozac_Truth.html)

Pharmacologic therapies can reduce your symptoms of thought, mood, or behavior disorder quickly. They can keep you comfortable and, for the most part, out of the hospital. With the advent of the first anti-psychotic medications in 1953, patients came streaming out of the wards of state mental hospitals where they had been housed, sometimes for most of their lives.

The sickest of these patients, usually without money or family, were most often found in the streets or in shelters, shifting the burden for their care from the state to the individual themselves, private charitable organizations, and local municipalities. These patients’ problems had not been solved. They were quieter and easier to manage with medication, but very few returned to society as functioning members.

The major problem with pharmacologic therapies were its side effects. Side effects were dose related and could be horrendous. Hoffer, whose work was with the most difficult acute psychotic thought disorders, asserted that pharmacotherapy essentially changes a schizophrenic psychosis into a tranquilizer psychosis. He described the iatrogenic psychosis as being, “…Characterized by psychological and physical changes. Usually the visions and/or voices are reduced in frequency and intensity, but sometimes they are
induced. Patients become apathetic and disinterested. They find it difficult to remember, and almost impossible to learn. They certainly cannot continue any educational career. On the physical side, they develop tremors, often tardive dyskinesia, hormone changes, frigidity or impotence and weight gain…. Patients prefer to be free of the side effects even if it means becoming psychotic again.”

Hoffer described what he called the tranquilizer dilemma. Pharmacologic agents do make you feel better. But they also make normal people sick. As you begin to recover, the closer you get to normal, the more likely the drug is to give you problematic effects. The natural disorder has been converted into a tranquilizer disorder.

At this point, psychiatrists often lower the dose of the offending pharmaceutical, start a new medication, or eventually remove the medication entirely. You may feel better as the medication level in your body drops, but then the original problem starts up again. Usually another medication is started, and you go back and forth between the two states, never progressing out of the problem.

Hoffer pointed out the contrast between this situation and patients who have been treated nutritionally: “Drugs have the advantage that they work quickly and the major disadvantage that they induce iatrogenic psychosis. Orthomolecular [nutritional] therapy has the disadvantage that it works more slowly, but the advantage that it does not replace one psychosis with another.”
Hoffer considered the patient well “When they are free of symptoms and signs, and are getting on well with their family and community. They are doing what they would have done had they not become ill, and they are…working and paying income tax. Few orthodox tranquilized patients can earn enough money to owe income tax. A patient who has recovered will cost society nothing and will, on the contrary, be a contributor. The savings can be enormous.”

The savings in human suffering are even greater. A thought disorder makes your world bizarre. Your thoughts are not under your control. They are weird, disjointed, perhaps coming rapidly. You head off on tangents and cannot correctly assess the circumstances around you. You react inappropriately. You interpret people incorrectly, sometimes monumentally so. Normal life is impossible.

Behavior disorders can cost you your job, your relationships, or your home. Even if you remain mostly in contact with reality, your smooth function is curtailed. Knowing that sometimes your behavior is off, and not knowing when it may happen again, leaves you wary and tentative, jumpy and ill at ease. Someone is bound to notice and there can be repercussions. You may start to obsess about it. You may become either totally immobilized, afraid to do anything, or radicalized, throw off the shackles and do whatever you want. In either case, it is a mess. It threatens your life as you have known it.
Mood disorders come in different varieties and severities also. You can feel too good or too bad for reasons that are not always clear. You can mostly explain why you feel the way you feel, but you may have a dim awareness that the reasons you give yourself do not really account for how up or down your mood is.

Depression is the most common disorder, especially in women. Mild or moderate depression may not ruin your life, it just takes all the pleasure out of it. Many people have functioned for years with moderate depression. You probably know some of them. It is sad. But severe depression stops you dead in your tracks. Your thoughts are totally black. You see no way that anything can work out for the better, and there is no hope for any relief. You are bleak, tearful, or even immobilized.

Feeling overly good is a certainly lot more pleasant than feeling overly bad. You may not even realize that they are the opposite sides of the same coin. Instead of feeling bad and being able to feel it, you get high, go and do something to get out of your head, run up every credit card you own, involve yourself with bizarre people, wild parties, crazy activities. You feel great. It doesn't seem bad at all, until you flunk out of school or lose your job. Then you may register feeling bad, or you may not. You may just enter into your next escapade. But it all has to stop somewhere. The piper needs to be paid.
As Hoffer continued his research, the recommendations for treatment expanded. The use of four-day water fasts and elimination diets led to the discovery that certain foods or other ingested substances cause cerebral allergy, brain symptoms that disappeared when the allergenic stimulators were eliminated.

*Gluten and casein alone were found to be responsible for one in twenty-five cases of psychotic thought disorder.*

Experience over time has shown that gluten and casein are problems for many patients. But the cerebral allergy provoking substance does not have to be food. It can be anything. In one patient, cerebral allergy to aspirin caused the onset of a severe psychotic thought disorder.

Vitamin deficiencies were found to be associated with psychiatric problems. Hoffer started his research on niacin, vitamin B3, because it was already known that B3 deficiency could cause dementia. Identification and treatment of other vitamin issues were accomplished, such as vitamin dependency, in which normal levels of a particular vitamin were just not enough for the individual involved. Amino acid and essential fatty acid deficiencies were addressed, as were mineral deficiencies. Toxic reactions to heavy metals were identified and treated. The foundation for the biomedical (nutritional) treatment of psychiatric/neurologic disorders was being laid.
The case for the right diet

Diet is foundational in the nutritional treatment of psychiatric disorder. If you are having a symptom that is caused by a food or a substance you are eating, the symptom will not resolve until that substance is removed. Your foods should have nutritional value, be organic, and be free of chemicals, additives, preservatives, and any other pollutants.

Your food should be eaten in the least processed form possible. You can negate double handfuls of nutritional supplements with poor food choice or quality.

High glycemic index foods should be avoided as blood sugar fluctuations are a common cause of psychiatric symptoms of all varieties.

The environment inside your gastrointestinal (GI) tract should be normalized. You should have optimal quantities of beneficial flora, and be free of pathologic bacteria, yeast overgrowth, and parasites. You may need digestive enzymes, probiotics, or other GI environment support.

Seventy percent of your immune system is located in your GI tract. It is home to over 400 species of bacteria and other organisms. It is the perfect setting for immune system suppression and the seeding of systemic infection of all varieties. The gut-brain connection has been widely acknowledged: abnormalities
in your GI tract environment may cause abnormalities in your thinking, mood, energy levels, or behavior. See the Publications page in my web site for papers on these subjects.

The role of pathogenic bacteria in producing abnormal behavior is just starting to be appreciated. There is a psychiatric disorder that is caused specifically by antibodies the body produces against streptococcal infection attacking the brain. It produces significant behavioral symptoms, such as obsessions, compulsions, and weird stereotyped behavior.

The Institute of Medicine issued a report titled, The Infectious Etiology of Chronic Diseases, in which was made the surprising claim that most cases of schizophrenia are caused by infections and other environmental events occurring in genetically susceptible individuals. An association between infection with the HSV2 virus and higher rates of this psychotic disorder was noted. Increased levels of antibodies to Toxoplasma gondii were found in individuals with recent onset schizophrenia. To normalize behavior in these cases, the infection must be eliminated. We grow closer all the time to real solutions for symptoms that were once considered psychological.

In order for psychiatric/neurologic disorder to be treated nutritionally, your body should be supported with appropriate levels of vitamins, minerals, and amino acids. This varies tremendously from individual to individual. Your levels should
be monitored through biochemical testing of blood and urine. Essential fatty acid levels should be optimized. In particular, adequate types and quantities of B-12 and folic acid should be present.

Hormone balance is also critical to optimal psychological function. Thyroid hormone is a central metabolic regulator well known to cause depression, anxiety, and many other psychiatric symptoms when unbalanced. Measurement of thyroid stimulating hormone (TSH) alone is a totally inadequate indicator of thyroid function. This idea will be elaborated below. The diagnosis of abnormal thyroid function is not a casual affair. Normalizing thyroid function is critical to your feeling well. It must be carried out thoughtfully and thoroughly.

Thyroid and adrenal functions potentiate each other. If your adrenal gland function is low, your thyroid will not function adequately. If appropriate thyroid support gives you symptoms, your adrenal gland must be treated first, and your thyroid addressed again later.

Your adrenal glands are your body’s first line of defense against stress. They produce cortisol, a hormone with important functions when your body is under stress. Adrenal stressors include chemical toxins, allergies, infections and psychological stress, among other things. If your adrenal glands are over worked, they are not able to produce the cortisol you need to remain symptom free under stress.
For example, high glycemic index foods are foods that increase your blood sugar levels rapidly and then let them drop. They are a stressor to your adrenal glands because cortisol must be secreted to stabilize your blood sugar. If your adrenal glands are too over worked or under nourished to produce cortisol, your blood sugar drops and you get symptoms of low blood sugar.

Adrenal hormones, among them cortisol, regulate blood pressure also. If you are not able to produce adrenal hormones quickly enough, your blood pressure levels do not remain steady. If you have postural hypotension, dizziness when you come to an upright position quickly, you are experiencing a blood pressure drop that may involve your adrenal glands.

**The Diet Dragon**

Diet is *the foundation* for good health. You must support a nutritional approach to the treatment of any illness with a diet that is the right one for you. There are certain general principles that apply to everybody, and then individual variations come into play.

If you are eating poorly manufactured food with little available nutritional content, you are asking for degenerative disease. Poorly manufactured food is all around you. It is common knowledge that the soil on which your food is grown is
overused, most often depleted of minerals and helpful bacteria, chemically fertilized, continually sprayed with pesticides or herbicides, and otherwise exploited for commercial interests.

Agribusiness is not concerned about you or about growing healthy food. They want to grow profitable food. The foods grown on these soils are often genetically modified to resist crop-destroying organisms. There is no information whatever about the impact over time on either you or the animals that eat genetically modified food.

Poorly manufactured food is problematic with respect to plants, but tragic with respect to animals. Animals are often grown under horrific conditions. They are treated with antibiotics to keep infection down because of crowding and fighting in the unnatural conditions in which they are housed. Mutilation of the animal is practiced to keep them from destroying each other in their distress.

Animals are laced with hormones to make them grow bigger and age them faster in order to get them to market quicker. They are fed plastic pellets that irritate their stomach lining to make them eat more. Finally they are processed (slaughtered) under totally inhumane conditions that increase the stress hormones in their bodies. Then, after slaughter, their flesh may be processed with acid, alkali or some other substance to promote the appearance of health,
which it would have had naturally if the animal had been grown under reasonable conditions.

You eat the antibiotic that is in their muscle and it changes the organisms in your gastrointestinal (GI) tract. You eat the hormones the animals were given to increase their weight and to get them to market more quickly, and it fattens and ages you.

You need to know what you are eating, to eat organic or naturally grown foods, and to restrict your eating in restaurants so you can maintain control over the quality of the food which you are putting into your body.

You should avoid the processed foods which are so readily available. These include sugar, cane sugar, concentrated sweeteners, barley malt, beet sugar, date sugar; corn syrup, corn syrup solids, high fructose corn syrup; dextrose, fructose, maltodextrin, turbinado sugar; deserts, pies, cakes, pastries; white flour foods such as pasta, pizza, bagels, pretzels, most breads and baked goods. These foods generate unhealthy blood sugar fluctuations and predispose you to growing the wrong organisms in your GI tract, especially yeast such as Candida. One of the metabolic byproducts of yeast is acetaldehyde. Acetaldehyde is toxic to your liver.
There should also be no additives, colorings or preservatives in your food. These are things that have no value as food, make no contribution to your body's nutrition, and use vitamins and other co-factors to process out of your body.

Read labels. You will be amazed at all of the extraneous materials in foods.

Avoid trans-fats, hydrogenated and partially-hydrogenated oils of any kind. These fats are in wide use because they are inexpensive and extend the shelf life of foods. However good they may be for the food manufacturer, they are not good at all for you. They impair your neurologic function by getting into your brain cell membranes where they make it difficult for important nutrition to pass into the cell and waste substances to pass out. Trans-fats are found in processed and pre-packaged foods. They are very common in restaurant food.

Avoid routine alcohol, caffeine and nicotine. Avoid any food which drives your blood sugar up rapidly. Your body, especially your brain, uses sugar as a fuel. Substances which drive your blood sugar up too high, too fast, will subsequently let it fall too low and leave your brain starving for fuel. This will give you brain fog, fatigue, lethargy, and other symptoms of low blood sugar. Done frequently enough, it will generate abnormalities in your body's ability to manage blood sugar. This can add up to diabetes or other blood sugar regulation problems.
There are foods which are perfectly good foods, but which happen to be bad for you. This can happen for any number of reasons, but a very common one is food intolerance or allergy. Many food allergies are immediate: you eat the food and you begin to have some symptom. Then it is very clear that you are allergic to that food. But you can have another kind of reaction, an intolerance to a particular food, that has a delayed onset. You experience the reaction from two to 72 hours after eating the food. It is really important to learn what foods you react to. Sometimes you can make this discernment yourself; sometimes you need food sensitivity testing.

Eat food as it comes from nature as opposed to a box or bag. Depending upon the condition of your GI tract, at least some of the food you eat each day should be raw. You should be eating fresh fruit and vegetables prepared in simple, healthful ways. The more ingredients a particular dish has in it, the more likely you are to react to it.

There must be sufficient fiber in your diet. You should be eating whole grains, beans, nuts and seeds. Fiber is the indigestible cell wall of the plant, found also in foods like bran, oats, corn, and celery. Brown rice, quinoa, amaranth, sweet potatoes, and yams have fiber and may be helpful if you have carbohydrate cravings.
Fiber is necessary for the proper function of your GI tract. Without fiber, the environment inside your intestine will not support the vitality of the muscle wall of the intestine. The muscles of your GI tract need bulk inside the intestinal space in order to contract down onto something and maintain their strength.

Starchy, sugary foods constrict inside the intestinal space, remove the resistance that your GI tract muscles need to work against, and weaken your intestinal muscular strength. Starchy, sugary foods also promote the growth of bacteria and yeast inside your GI tract that produce toxins as a metabolic byproduct.

Your food should include good quality sources of protein from meat, non-polluted fish, fowl, eggs and various plant sources. Dairy can be a problem for many and should not be added to your OK foods list without scrutiny. Avoid processed proteins such as lunchmeats, processed cheese and textured vegetable proteins (TVP).

You should not eat on the run. This is pretty hard to do in many lifestyles. It is important to sit down and give eating the time it deserves so your GI tract can work optimally. Chew your food. The process of digestion begins with chewing. Chewing is especially important in the digestion of protein. The smaller the particle of protein that goes down into your stomach, the better it will digest.
Gluten, the protein fraction of wheat, rye, barley, oat, kamut, spelt, triticale and amaranth, and casein, the protein fraction of cow, goat and sheep dairy, are hard to digest proteins that many people, adults and children, cannot tolerate. In their half-digested state, they form molecules with similarities to morphine. They are addictive and sometimes cause immediately recognizable symptoms. In other cases, the symptoms are more subtle. But these foods can profoundly negatively impact how you feel, your state of well-being, and the function of your body.

Nobody wants to be the person who cannot eat gluten or casein, but if you overlook this problem, you run the risk of having symptoms that you just cannot resolve.

You need to break the habit which is your diet now. Find substitutes that you honestly enjoy for all the problem foods you are eating. They do exist. Establish a new habit. If a food is giving you a symptom, you will not be able to remove the symptom without eliminating the food. By changing your bad diet habits, you lay the foundation that makes your recovery possible.
Thyroid Disaster

Of all of the glands in your body, your thyroid gland is the one most likely to develop a problem. And many of the symptoms of thyroid imbalance look similar to psychiatric disorder.

Almost one out of ten Americans, twenty-seven million people, have some form of thyroid disorder, and eighty percent of this number are women.

Women are five times more likely than men to develop thyroid problems, underactive thyroid being the most common. And what makes this worse is that hypothyroidism, an underactive thyroid gland, is also a commonly missed diagnosis. So you can have an underactive thyroid and end up being treated with psych meds!

Twenty-six thousand people at a Colorado State Fair volunteered to have their thyroid function tested. They submitted to routine blood testing and filled out a short questionnaire. The blood tests used were not highly sophisticated tests; they were just broad stroke testing for thyroid problems.

The subsequent study was published in 2000. The Colorado Thyroid Disease Prevalence Study uncovered that 10% of the study participants had abnormal
thyroid function that had not been discovered by that person's doctor. So, **thirteen million** people nationally may have undetected thyroid disorder, most of them being women.

The function of your thyroid is very important to your overall well-being. Every cell in your body needs miniscule amounts of thyroid hormone to function properly, especially the cells in your brain. Thyroid hormone regulates cell temperature, energy production, cell function, cell growth and your body's metabolic rate.

When your thyroid hormone is low or not functioning optimally, you may experience decreased energy, unstable or unpleasant mood, decreased resistance to infection, increased inflammation, altered fat metabolism or one of the many other problems listed for you below.

Diminished active thyroid hormone levels in the elderly are associated with lowered attention, depression, increased mortality, and lowered ability to perform the activities of daily living.

Low thyroid makes any illness worse.

The most common cause of thyroid disorder is autoimmune illness. Your immune system wrongly attacks your thyroid gland. Runaway environmental pollutants and the thousands of new chemicals in our environment are the most likely
cause of autoimmune thyroid problems. Some of these chemicals are hormone mimics. Others are hormone blockers. Others are immune disrupters. Many are low level poisons. The common result is that your body wrongly attacks your thyroid gland, and your thyroid becomes inflamed, producing sub optimal amounts of active hormone.

The model that doctors are still using to describe how the thyroid gland works is hopelessly old and simplistic. Doctors use this traditional model because it is true, in part. But it is only a very small part of the big picture of how thyroid hormone is regulated, produced and functions in your body.

Thyroid stimulating hormone (TSH) is produced in a part of your brain called the anterior pituitary. TSH from the anterior pituitary then stimulates your thyroid gland to produce thyroid hormone. When a sufficient amount of hormone is produced, a feedback loop tells your brain to slow down the production of TSH. When TSH production is diminished, the stimulation of your thyroid gland to produce hormone is lessened. When the amount of thyroid hormone in your blood drops too low, your brain gets the signal to produce more TSH, and the production of thyroid hormone goes back up again.

This model is being used to justify the common practice of testing only TSH level to screen for thyroid disorder. The function of the most central metabolic gland in your body, the gland that regulates your cell temperature, energy
production, cell function, cell growth and the metabolic rate of your entire body, is
being assessed by one test only.

If you go to your doctor with the most obvious symptoms of low thyroid function
and your TSH measurement comes back normal, he will tell you that your
problems are not due to low thyroid. You may then go on a years-long wild goose
chase trying to find out why your hair is falling out, you are tired all the time, you
can't lose weight, and your skin is sagging.

Cholesterol is one of your body's important fatty acids. Thyroid hormone
balances fatty acid metabolism. So if you are low thyroid and your doctor has not
figured that out, your high cholesterol will be treated with pharmaceuticals
instead of diet, exercise and corrected thyroid hormone levels.

Basing thyroid treatment decisions on TSH alone is totally unsuited for detecting
subtle thyroid failure. The thyroid system in your body is much more complex
than the current model describes.

TSH reflects the status of only one kind of thyroid hormone receptor, the one in
the anterior pituitary of your brain. There are different types of thyroid receptors
on different organs in your body, and even in different parts of your body. Using
TSH alone to determine the status of thyroid hormone function in your entire
body is analogous to using the thermostat in one room of a hotel to decide the temperature for every single room in the building.

In addition, thyroid receptor sites come in different sizes even when they are on the same organ. They differ in the ways in which they bind thyroid hormone, and the ways in which they send the signal that the binding of the hormone initiates. Certain substances can block the binding of thyroid hormone to its receptor site. What these substances are can be different for different body sites.

It gets even more involved. The thyroid gland produces T4 that is the storage form of thyroid hormone while it is in your bloodstream. T4 circulates in your blood stream until it is transported into one of your cells. Only inside the cell is T4 converted into T3, the active form of thyroid hormone.

There are many factors that can inhibit the conversion of T4 into T3. Nutrient deficiencies, fasting, certain medications, aging, alcohol, cigarette smoking and stress will all inhibit this conversion, as will fluoride and non-fermented soy products.

The conversion can be deterred by any agent that displaces iodine from the thyroid hormone molecule, like fluoride that is alleged to prevent tooth decay, or bromine, which has been added to baked products. Iodine deficiency in patients
is rarely diagnosed, yet it is a common cause of low thyroid and thyroid gland dysfunction.

Beyond that, other factors can impact either the formation or the function of thyroid hormone. They include

- the effective transport of T4 to into the cell
- the effective conversion of T4 into T3 once it is inside the cell
- the capacity of T3 to function actively once it returns to the intercellular environment, i.e., once it gets back out of the cell into the bloodstream
- the responsiveness of the thyroid receptor sites on the different organs of the body to the T3
- and, finally, the presence or absence of other hormones and neurotransmitters that are important for thyroid hormone function.

For example, estrogen is an important synergist for thyroid hormone. It makes the function of thyroid hormone stronger. When estrogen levels drop at menopause, thyroid hormone potency is negatively impacted. So you get the symptoms of menopause and low thyroid at the same time.

The conversion of T4 into T3 inside the cell is also not so simple. When T4 goes into a cell, an enzyme called a de-iodinase must remove one iodine molecule to
make it into T3. Then T3 comes back out of the cell and goes into the bloodstream to its end site, the place in your body where it will work.

There are different types of de-iodinases that function in different organs. There are different de-iodinases for different areas of your body. And the ability of any of these de-iodinases to function will depend upon the conditions they encounter at their particular location in your body.

Finally, in 2003, the British Medical Journal acknowledged that, "...A judicious initiation of [thyroid hormone] treatment should be guided by clinical and metabolic presentation and thyroid hormone concentrations and not by serum TSH concentration" (British Medical Journal 2003; 326:311-312).

This medical authority is acknowledging that the treatment of hypothyroidism is much more complex than giving you a standard dose of the standard form of thyroid hormone if your TSH is high. It involves the correction of whatever condition has put you into the low thyroid state. It may involve careful trials of different forms of thyroid hormone to find the right one for you.

Low thyroid is usually easily to correct. You will not feel well if the problem is missed. You are liable to be given many pharmaceuticals for multiple problems, among them psychiatric medications. Some of these medications may interfere
with important biochemical processes in your body and have dangerous side
effects.

Below are the common symptoms of low thyroid hormone. If you have these
symptoms, do not let your doctor tell you that your thyroid is OK unless he has
tested thoroughly and is aware of the facts I have just outlined for you.

- Significant fatigue, lethargy, sluggishness, or history of low
  thyroid at an earlier age
- Hoarseness for no particular reason
- Chronic recurrent infection(s)
- Decreased sweating even with mild exercise
- Depression, to the point of being a bothersome problem
- A tendency to be slow to heat up, even in a sauna
- Constipation despite adequate fiber and liquids in diet
- Brittle nails that crack or peel easily
- High cholesterol despite good diet
- Frequent headaches (especially migraine)
- Irregular menses, PMS, ovarian cysts, endometriosis
- Unusually low sex drive
- Red face with exercise
- Accelerated worsening of eyesight or hearing
- Palpitations or uncomfortably noticeable heartbeat
- Difficulty in drawing a full breath, for no apparent reason
- Mood swings, especially anxiety, panic or phobia
- Gum problems
- Mild choking sensation or difficulty swallowing
- Excessive menopause symptoms, not well relieved with estrogen
- Major weight gain
- Aches and pains of limbs, unrelated to exertion
- Skin problems of adult acne, eczema, or severe dry skin
- Vague and mildly annoying chest discomfort, unrelated to exercise
- Feeling off balance
- Infertility
- Annoying burning or tingling sensations that come and go
- The experience of being colder than other people around you
- Difficulty maintaining standard weight with a sensible food intake
- Problems with memory, focus or concentration
- More than normal amounts of hair come out in the brush or shower
- Difficulty maintaining stamina throughout the day
The physical signs of low thyroid hormone function include:

- low basal temperature in early morning (average of less than 97.6 degrees over 7 days)
- slow movements, slow speech, slow reaction time
- muscle weakness
- thick tongue (tongue seemingly too big for mouth)
- swelling of feet
- swelling of eyelids or bags under eyes
- decreased color of lips or yellowing of skin
- swelling at base of neck (enlarged thyroid gland)
- asymmetry, lumpiness, or other irregularity of thyroid gland
- swelling of face
- excess ear wax
- dry mouth and/or dry eyes
- noticeably cool skin
- excessively dry or excessively coarse skin
- especially low blood pressure
- decreased ankle reflexes or normal reflexes with slow recovery phase
• noticeably slow pulse rate without having exercised regularly
• loss of outer one-third of eyebrows

You can have these symptoms and see these physical signs with conditions other than thyroid disorder. Also, you can have syndromes that may exist concurrent with thyroid disorder. So you really need the advice of an informed clinician if you think you have a thyroid problem.
Hormone Cacophony

Telling you about hormones is not as simple as it used to be.

You may be familiar with the hormones estrogen, testosterone, and progesterone. You may even be aware that estrogen is the main female hormone, testosterone is the predominant male hormone, and progesterone is the hormone of pregnancy.

It used to be pretty cut and dry. But hormones clearly have more impact than just making females female and males male. Hormones have profound emotional impacts, impacts on your mood and brain. The jokes about women and their cycles are valid. The evidence for this becomes more pronounced when your hormones are out of balance, as they are in premenstrual syndrome and at menopause. Either too much or too little estrogen can cause depression. This is related to why women are twice as likely to get depressed as men. Hormonal imbalance can be important in some patients with psychiatric syndromes. Which patients these are is highly individual.

Estrogen is the predominant hormone in the female body. It is the female's most active hormone. Your body has estrogen receptor sites everywhere: in your brain, your heart, lungs, and blood vessels. There are estrogen receptor sites in
your muscles and bones, which is why low estrogen can lead to osteoporosis.

Estrogen receptor sites are present in your skin, eyes, intestinal tract and urinary bladder. And, of course, if you are female, there are estrogen receptor sites on your female organs and breasts. They are everywhere.

Estrogen levels are critical to maintaining the integrity of your brain tissue. Male or female, you lose function in key neural structures if your estrogen is too low. Estrogen selectively enhances the main site of memory in your brain. Drugs used for high cholesterol and other conditions interfere with estrogen production. Cholesterol lowering drugs inhibit an enzyme, HMG-CoA-reductase, that is necessary for cholesterol production in the brain. People taking HMG-CoA-reductase inhibitors like the statin drugs, get dementia sooner than they would with normal aging. Cholesterol is a precursor needed to make estrogen, progesterone and testosterone.

Estrogen also has a protective effect on your muscles and the parts of your nervous system known to be involved in Parkinson’s Disease. Low estrogen may lead to muscle twitches and restless legs in both men and women. The estrogen receptors on bones are important for osteoporosis in both men and women also, although women outnumber the men who get this syndrome. Not surprisingly, hormones are involved in the production of symptoms and syndromes in women more than they are in men, psychiatric syndromes included.
Hormones can impact your mood and brain because of an important communication network in your body. Every biologic function, every brain function, every cell function, is under the control of your nervous system by way of its network of communication. Protein molecules called neurotransmitters (NTs) are the messenger molecules in the nervous system's network that coordinate all of the various functions of your body.

NTs function like a key for a lock. The receptor for the neurotransmitter (NT) is embedded in the wall of your cell. It is like the lock. When the NT fits into the receptor, it is like turning a key. Turning the key induces your cell to perform the function involved with the NT.

NT receptor sites are present in every organ and system, just like estrogen receptors. There are receptor sites for NTs located in your gastrointestinal tract, on your heart and circulatory system, your endocrine organs, and your immune system. Receptor sites for NTs are everywhere.

Your most important relaxing NT is serotonin. It is your ‘feel good’ NT. It modulates mood and pain pathways. When serotonin drops, it causes problems with depression, anxiety, sleep, memory, concentration and increased pain sensitivity.
Estrogen supports serotonin. Their functions synergize one another. So when age or menopause causes your estrogen levels to drop, your brain function actually declines and your emotions may become erratic as well.

Serotonin impacts your thyroid gland also. Estrogen and serotonin both support the production of thyroid hormone. There are receptor sites for serotonin in your brain that have a direct effect on how much thyroid stimulating hormone (TSH) your brain can secrete when it gets the signal.

You may remember from the thyroid material above, that when your body gets low on thyroid hormone, certain thyroid receptor sites in your brain become under stimulated. Your brain then sends a hormone signal to make TSH, which in turn stimulates your thyroid gland to make more thyroid hormone. So when your body needs thyroid hormone, you would expect your TSH level to be elevated.

You may also remember that most doctors still use only one test, your TSH level, to check your thyroid function. But if you do not have enough serotonin, the ability of your brain to make TSH is blunted. With too little serotonin, you may need thyroid hormone, but your brain cannot make TSH, so your TSH level will be low. Your doctor will take your low TSH level as an indication that your thyroid is OK. Your low thyroid problem will not get diagnosed or treated.
You can wander in this desert for at least forty years, never crossing over to the correct diagnosis or the promised solution.

When your thyroid function is diminished, your adrenal gland function is reduced as well. So now you are low estrogen, low serotonin, low thyroid, and low adrenal. An incapacitating psychiatric syndrome is only a hair’s breadth away, if it has not already manifested.

The estrogen/serotonin/thyroid connection is only one of many important molecular biologic connections in your body. Every day scientists learn more about the important interconnections of the functions in your body. Every day pharmaceutical firms put out more advertizing to tell you that there is a pill you can take to fix your problem. There isn’t. No pill is going to do for you what you must bring back into balance by lifestyle change, intelligent nutritional supplementation, and judicious use of some prescription items, like thyroid hormone and bio-identical estrogen, progesterone, or testosterone.

Many safe and helpful pharmaceuticals have been around for a long time. Those are not the ones you hear about. They do not make drug companies any money. It’s the new, expensive ones that work in tricky ways that you will see on TV. You cannot afford to distort your body with pharmaceuticals long term. The impacts are too far reaching and profound.
Nobody, not the pharmaceutical firm that manufactures it, nor the FDA, nor any doctor has any clue what that drug will do to you over time. Drug companies do not do safety testing for very long. They can't afford it. They need to get the product to market to earn back the money they spent developing it.

The bottom line is that long term, the guinea pig is **YOU**.
Epilogue

Where do we go from here?

There is no way I can say everything you might want to know in this e-book. But I do want to answer the questions you may still have about what is happening with your body. If you need further information, you are invited to come to my Open Forum which is held every Tuesday night at 5:00 PM US Pacific Time. The number to call is (605) 562-3140. Then enter access code 691392# and you’ll be on the Forum. There I will

- speak with you personally
- get an idea of what your problems are
- find out what you have already tried
- answer your questions, and
- tell you what you need to do next to make progress.

I look forward to talking to you there!
“This whole treatment with you has been such a blessing. It’s been incredible for us to find this, to know the science behind it, and to finally find a doctor who knows which direction is up…."

Deb Milam

These are typical of the sentiments expressed toward Dr. Nancy Mullan after engaging her as your medical and methylation genetics consultant. You get immediate clarity and direction about your treatment. You won’t feel so lost and confused. You get prompt help when a problem comes up, so you feel less frightened and vulnerable. You feel more in control, confident, and hopeful as you work to get your health back. You know that you are engaged with a doctor who can tell you why you are having the symptoms you are having, and answer any tricky biochemical questions that may come up. Dr. Mullan works with Dr. Amy Yasko who has a significant background in molecular biology, naturopathy, and genetics. Together these women have an impressive track record for getting you to the other side of very frightening and intractable illnesses. Both doctors are tremendously invested in clinical innovation and finding out what it is that will get YOU well.
Dr. Mullan has a deep, compassionate interest in you which comes through in her down-to-earth demeanor and candid approach to your care. She says, "Keep in touch," and she sincerely means it. She wants to stay right on top of your treatment to move it in a positive direction. To do that, she holds a weekly **Patient Forum** to which you are encouraged to come so you can ask questions and be sure you are doing the right thing. She has a passion for healing, and is profoundly motivated to help you solve your chronic disease issues,

Dr. Mullan received her undergraduate degree from the University of Pennsylvania and an MD from Tufts University. She completed an internship and residency in Psychiatry and a fellowship in Child Psychiatry at the University of Chicago Hospitals and Clinics. While in Chicago, she studied at the Chicago Institute for Psychoanalysis and taught at the Psychosomatic and Psychiatric Institute for Research and Training at Michael Reese Hospital. After coming to Los Angeles, Dr. Mullan joined the medical staff at Cedars-Sinai Medical Center and taught at both UCLA and USC Schools of Medicine. She earned Psychoanalytic Certification from the Psychoanalytic Center of California.

Dr. Mullan is currently practicing genetics based medicine in Burbank, California. She has helped literally thousands of people achieve their goals in treating
MTHFR+, Lyme Disease, Chronic Fatigue Syndrome, Fibromyalgia, Psychiatric Disorders, Autism Spectrum Disorders, Heavy Metal Toxicity, and other syndromes.

In order for you to get to know her work, Dr. Mullan holds a weekly Open Forum on Tuesday evenings at 5:00 PM Pacific Time. The call in number is (605) 562-3140. Punch in access code 691392#. International access numbers are available.

**Specialities:**
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Chronic Fatigue Syndrome
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Autism Spectrum Disorders
Women's Health
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Gastrointestinal Disorder
Heavy Metal Toxicity