



JOURNAL OF THE JANMA

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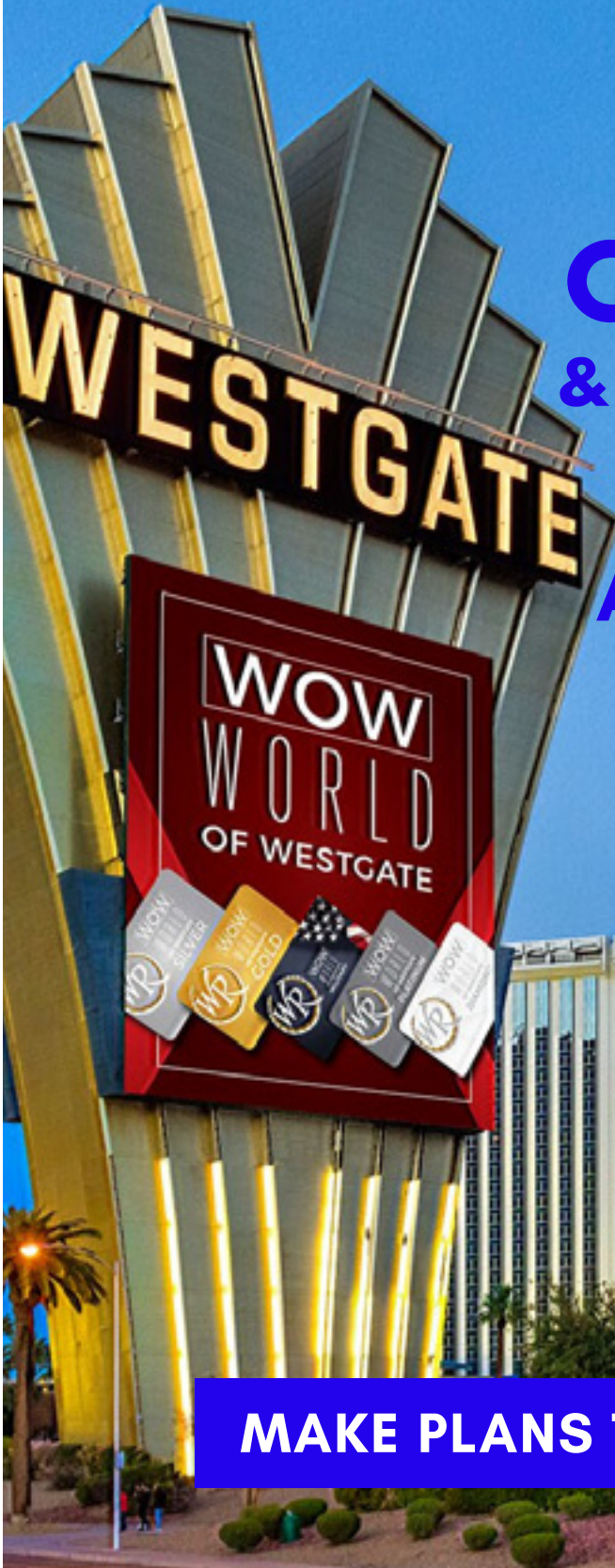
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AMERICAN NATUROPATHIC
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The President's Corner

Dr. Filippos Diamantis PT, Ph.D, NMD

Happy Convention time to all!

The convention is quickly approaching, this celebration will mark 38 years representing REAL naturopaths and protecting naturopathy for public access in America. The ANMA 38th Annual Convention and Educational Seminar is the largest naturopathic professionals gathering in the US. This is the easiest way to get your needed CEU's! ANMA provides 23 credits in one fabulous 3-day weekend Aug 23-25, 2019 in Las Vegas. Those of you who are planning to attend have expressed your excitement for the speakers on the main lecture schedule as well as the workshops provided. Many appreciate the Awards Luncheon Gala that celebrates their accomplishments. And everyone agrees the ANMA annual convention is a great venue providing one on one meetings with industry experts. I urge you to support the association that supports YOU. As president of ANMA I really look forward to this event and I hope to see YOU in Las Vegas.

This year American Naturopathic Medical Association (ANMA) will join forces and welcome Society of Complementary, Alternative, and Holistic Practitioners (SCAHP) as strategic partners in the field of natural health care. Working together to protect natural therapies availability to the public and the practitioners right to provide this valuable information to the public. What does this mean to current ANMA members? Current ANMA will receive automatic membership in the SCAHP and be automatically approved to get SCAHP certified with the title Advanced Complementary Alternative Holistic Practitioner – ACAHP. For details visit www.scahp.org.

Also, this year for the first time ever ANMA is offering the ANMA Naturopathic Scholarship! This award of \$500 will help two students from each naturopathic ANMAB approved school to complete their naturopathic education. This will be offered to students of every American Naturopathic Medical Accreditation Board (ANMAB) accredited school that offers a naturopathic title. Go to www.anmab.org to see if your school qualifies.

In 2019 ANMA will be keeping a watchful eye on legislation. Congratulations to all the members ANMA couldn't do this without you. As 2019 proceeds, ANMA will keep all members informed of ANMA legislative efforts.

Come early to the 2019 ANMA annual conference and enjoy a powerful trio of classes. This 3-day workshop lineup covers three different topics, with three different well-known instructors. They are being offered by the International Institute of Natural Wellness Education. Found online at KnowYourWellness.org this school has proven themselves as a leader in Traditional Naturopathy education. Among the many reasons to come to these workshops is that tuition to these workshops includes full admission into the 2019 ANMA annual convention. Each workshop also includes a spiral bound workbook and online modules and materials that you will complete prior to attending the live workshop. You can attend one or all three of these empowering workshops designed to give naturopaths useful tools that they can apply in their practice right away. Tuition for these workshops is \$295 for one day long workshop or \$595 for all three amazing workshops. To enroll visit KnowYourWellness.org or call 208-899-2712.

Sound Wave Acu-point Therapies Tuesday Aug 20, 2019 from 9 AM - 5:30 PM

In this workshop you will be introduced to key acu-points from Traditional Chinese Medicine (TCM). These points are the same as those used in acupuncture; however, during this class you will learn how to use sound waves by applying specific tuning forks to stimulate a variety of responses. This technique of applying sound waves to TCM acu-points has proven to be a powerful tool for naturopaths all around the country. This provides an effective way to balance clients with a method that can be done through the clothing, eliminating the need to have clients disrobe. It is also considered a non-invasive therapy that can be applied ethically and safely in most states and practice settings. This lecture will be taught by Dr. Matthew Hollist, who is the Executive Director of KnowYourWellness.Org and full time educator of Traditional Naturopathy. Dr. Hollist is a Nationally Board Certified Naturopath with a second diplomat in Naprapathy. With his diplomat in Naprapathy, he ran several successful practices as a manual therapist where he incorporated naturopathic principles with the manual modality and tuning fork applications for chronic illness. He has taught the same to hundreds of students all around the country for many years

Traditional Herbal Remedy Making Wednesday Aug 21, 2019 from 9 AM - 5:30 PM

One of our most sought after lectures is during the Traditional Herbology term. In this lecture you will feel like a historic herbalist as you lose yourself in the art of making traditional herbal remedies. You will learn how to select, process and produce all types of herbal products such as; tinctures, infusions, decoctions, poultices, salves, balms, lotions, washes, baths, fomentations, therapeutic oils and much more. Regardless of whether you produce these products for your clients or not, learning how to produce them gives you invaluable insight into true herbalism that can't be gained any other way than getting your hands dirty and learning this historic art. This lecture will be taught by Professor Laurence Smith. Professor Smith has been a full time professional herbalist for over 25 years. He is renowned as an educator all across the U.S. and Canada. He is also a member of the Board of Directors for KnowYourWellness.org as well as Director of Clinical Advisement. Professor Smith also teaches our herbal wildcrafting workshops and is the Clinical Advisor for the Traditional Herbology term.

Homeopathy For Naturopaths Thursday Aug 22, 2019 from 9 AM - 5:30 PM

In this lecture you will build upon the basic understanding of homeopathy that naturopaths have as you work toward a more targeted approach to homeopathy in action. You will learn to use proper reference material to identify homeopathic remedies that have been proven for a given imbalance. You will learn the practice of homeoprophylaxis that is used as a method of educating the body's own immune response. Homeoprophylaxis is used internationally as an alternative to the practice of modern immunizations. In short, in this lecture you will learn how to apply homeopathy & homeoprophylaxis fluidly into your naturopathic practice. This lecture is taught by Professor Neil Schultz. Professor Schultz is a Nationally Board Certified Naturopath and is also Nationally Certified in Homeoprophylaxis. He is a member of the Board of Directors for KnowYourWellness.org. Aside from his position on the board, he also teaches the Advanced Homeopathy/Homeoprophylaxis post graduate program. When he is not teaching, Professor Schultz is working in his practice with his library of nearly 2,500 different homeopathic remedies that he has painstakingly acquired from around the world.

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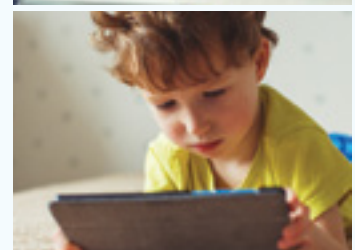
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Be Good to Your Gut Microbiome

Marvin Singh, M.D.

The term “gut” is colloquial for the gastrointestinal tract, or G.I. tract, which is an organ system that starts in the mouth and traverses the entire length of the esophagus, stomach, small intestine, and colon (or large intestine). It also includes the salivary glands, liver, pancreas, and gallbladder. Its function is to take the food you eat, digest it so that nutrients and energy are extracted and absorbed into the body, and expel the remaining waste in a bowel movement. It’s like a transit system in the sense that when it works properly, runs on time, and doesn’t get backed up, you’re happy and content. But when there’s traffic or some sort of accident, you’re not the happy camper you once were.

We now know that there’s a whole ecosystem of bacteria, viruses, and fungi that live within the gut that influences the transit system. This ecosystem is referred to as the “gut microbiome,” and it regulates metabolism, manufactures vitamins for the body, turns genes on and off, and communicates with other cells in the body. The 100 trillion microorganisms that coexist with each other and within the human body outnumber human cells by a factor of 10. The genetic material (DNA) of the microbiome outnumbers human DNA by a factor of 100.

The gut microbiome is considered an organ itself, a so-called “second brain” as it holds its own nervous system, the enteric nervous system. It even has a weight similar to a human brain at about 3-5 pounds. It produces several neurotransmitters, including 90-95% of serotonin, the neurotransmitter that contributes to feelings of happiness and wellbeing.

Another significant job the gut microbiome is responsible for is immune function. About 70% of the body’s immune system is located in the gut and the microbiome plays a substantial role in modulating the immune system. If the microbiome is balanced and the good microbes keep the bad microbes in check, then the immune system can do its job of protecting the body from potential infections from outside invaders, like the viruses that cause colds, flu, or gastroenteritis (food poisoning). Unfortunately, the microbiome can become compromised for a variety of reasons – stress, antibiotics, infectious pathogens, toxins, herbicides, pesticides – and the bad microbes overrun the good microbes. This state of imbalance, called dysbiosis, can lead to inflammation, illness, chronic disease, and even anxiety/depression.

Both dysbiosis and microbiome diversity are

important influencers of human health and wellbeing. Research shows that a high microbial diversity – having many different species of gut bacteria – is correlated with better overall health compared to low microbial diversity which has been observed in disease states. The exploding incidence of autoimmune-related diseases in Western countries, such as allergies, inflammatory bowel diseases (Crohn’s disease, ulcerative colitis), type 1 diabetes, and multiple sclerosis, as well as colorectal cancer, metabolic disorders like obesity and type 2 diabetes, and autism has been linked to loss of microbe diversity. Leaky gut or intestinal permeability may also play a role in initiating chronic inflammation that contributes to these same autoimmune diseases.

An imbalanced microbiome is likely to produce unpleasant symptoms, such as bloating, abdominal cramps, gas, constipation, or diarrhea. These glitches in the transit system can and should be addressed before a more serious situation occurs. In fact, maintaining a balanced microbiome is an everyday task that can be approached through lifestyle changes. Improving gut health entails eating a healthy, anti-inflammatory focused diet, exercising regularly, getting enough restorative sleep, and reducing emotional stress. Even if your life is super hectic, try starting with dietary changes. Dump the processed and fast foods and opt for freshly prepared meals. Include anti-inflammatory teas and herbs such as green tea, oolong tea, turmeric, and ginger. Many health care practitioners like myself often suggest adding nutritional supplements that specifically address integrity of the gut lining, including zinc carnosine, L-glutamine, and bovine colostrum.

Bovine colostrum is a nutritional supplement that has been around for several decades and

was popular with elite athletes as a safe and legal performance-enhancing supplement. Today, it is gaining acceptance for its benefits with leaky gut and inflammatory-related conditions. Early research showed that it was quite effective in healing damage to the gut lining in people who took non-steroidal anti-inflammatory drugs (NSAIDs) and in resolving some gastrointestinal diseases. , , Recent research suggests that bovine colostrum decreases intestinal permeability in athletes who are especially prone to experiencing leaky gut as a consequence of heavy exercise. ,

With respect to infections, research has demonstrated that bovine colostrum supplementation can reduce the incidence of flu and number of sick days in healthy and high-risk cardiovascular patients. , It can also assist patients with HIV-associated diarrhea. Today’s research focus has turned to improving the health of preterm infants and reducing upper respiratory infections and diarrhea in young children. , These studies also demonstrate the safety of bovine colostrum for a wide variety of ages. Only individuals who have experienced an anaphylactic reaction with bovine dairy products should avoid bovine colostrum.

To ensure that you’re getting a high-quality bovine colostrum supplement, look for one that utilizes liposomal delivery (LD), is pharmaceutical-grade (i.e., not veterinary-grade), is flash-pasteurized/low-heat dried, and is standardized to contain a minimum quantity of specific bioactives. LD ensures the bioactives (aka helpful, therapeutic components) make it through the harsh acidic environment in the stomach and end up in the gut without being broken down until they reach their intended destination and are best absorbed. The important bioactives in colostrum include immunoglobulins (25-30%), lactoferrin (1.5%), colostrum polypeptides (3.5-5%), and growth factors (1.5%).

More than two centuries ago, Hippocrates said

“All disease begins in the gut.” We are just now learning how true this is. Gut health is critical to one’s overall health, and you can start improving your health by taking care of the ecosystem within. Listen to what your gut bugs are telling you, and before you pop a pill, try some of the strategies mentioned above. A natural, comprehensive approach to gut health is just what this doctor has ordered and what your microbiome desires!

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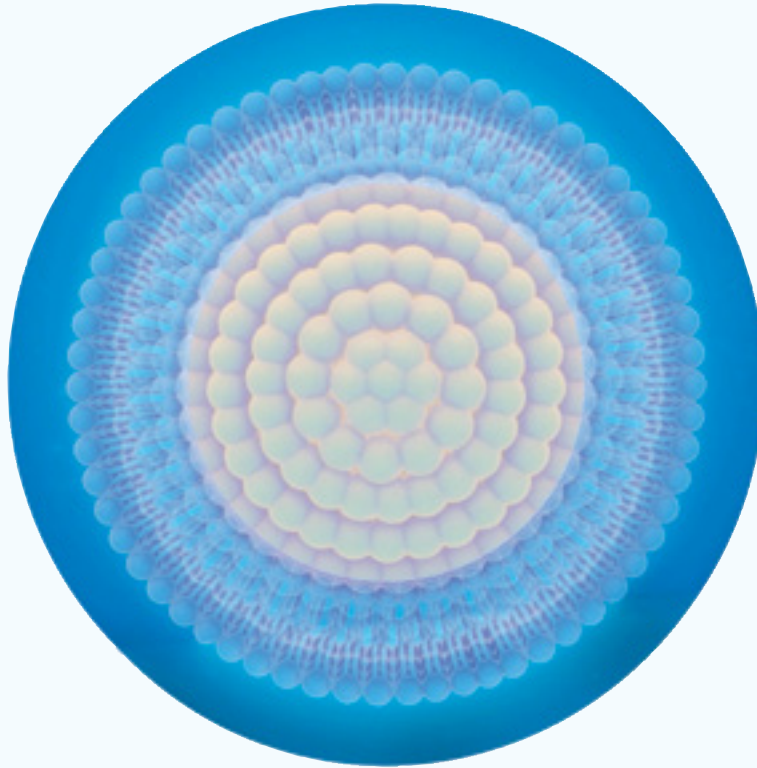
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About the Author: Dr. Marvin Singh practices as an integrative gastroenterologist in San Diego, California. He is a diplomate of the American board of integrative medicine, and board-certified internist and gastroenterologist. Dr. Singh was trained by Dr. Andrew Weil, a pioneer in the field of integrative medicine, at the University of Arizona Center for Integrative Medicine. Dr. Singh is currently a voluntary assistant clinical professor at UCSD in the Department of Family Medicine and Public Health; prior to this, he has been a clinical assistant professor at UCLA and an assistant professor of medicine at Johns Hopkins University. Dr. Singh is a member of the American Academy of Anti-Aging Medicine, American College of Lifestyle Medicine, and the True Health Initiative, and is actively involved in the American Gastroenterological Association and American Medical Association.

Dr. Singh is dedicated to guiding his patients toward optimal wellness every step of the way, in whatever manner they need it. He uses cutting-edge tests and personally designed protocols to develop a truly individualized plan based on genetics, microbiome, metabolism, and lifestyle. A graduate of Virginia Commonwealth University School of Medicine, Dr. Singh completed his residency training in internal medicine at the University of Michigan Health System followed by fellowship training in Gastroenterology at Scripps Clinic/Green Hospital.

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9 Major Health Bandits as of Mid-2019

A Hypothesis to Explain the Explosive Rise of a Number of Chronic and Degenerative Diseases Over the Last 40 Years

Dr. Bob Lund

Summary: Chronic and degenerative diseases (CDDs) are on the rise like never before. The World Health Organization says that CDDs are the main causes of death and disability worldwide. The rate of disease from these conditions is "accelerating globally, advancing across every region and pervading all socioeconomic classes." The major chronic diseases currently account for almost 60% of all deaths and over 40% of the global burden of disease. By 2020 these numbers are expected to be 73% and 60% respectively.

¹ As it turns out, there are over 36 diseases that have doubled since 1990, and of those, 20 that have tripled and 16 that have quadrupled.² These have no infectious germs involved and there are no recognized cures. More than 65% of all U.S. Adults use prescription medication.³ Most of the people over 40 who come to see me are on some kind of pharmaceutical drug. And most know that while those drugs are providing some relief, they are often making things worse in the long run. And to our chagrin, even in the alternative, natural and holistic (ANH) practitioner community, many people have a cupboard full of vitamins and other pills, most of which they are not even sure are working. In 1965 only 4% of the U.S. population had a CDD. Today, according to the CDC, 60% of

Americans have at least one CDD.⁴ Herein, I propose a small but multi-factor set of underlying root causes or contributors to the meteoric-rise of CDDs.

Introduction

The current traditional western medical system (TWM) focuses on managing disease, not curing it, or even considering what the root cause(s) might be. Since it is not possible to have an epidemic of a genetic disease, something else is going on here... It is time that ANH practitioners teach people how to take back their health and get to the bottom of what is causing the tsunami of CDDs that plague us today. Most of the CDDs that result from the health bandits below have oxidative stress and inflammation at their roots,⁵ with one molecule, peroxynitrite, implicated in virtually all the CDDs.⁶

Why am I beleaguering you, dear reader, with the above barrage of negative statistics? It's because in the span of just a few decades a virtual plague of CDDs has overrun the U.S. We don't have time for congress, medical schools, textbooks or doctors to change. The TWM system of healthcare has too much hubris and internal resistance to radically alter an economic

machine that rewards everyone (but the patient) by managing, not curing these diseases. We ANH practitioners need to act, and act now. We must settle for nothing less than root cause(s) and aim to empower Joe and Suzy Lunchbucket, our clients, to actually take their health back for themselves. At a minimum we must eschew any practices that reflect the current TWM tradition of pill-for-the-ill-drug-for-the-bug; we must press on to root cause(s). And we must resolve ourselves to actually teach and train Joe and Suzy to measure, monitor and maximize their own health as reflected in metabolic balance and vital reserves.

When one of my recently adopted heroes submitted his summary of over 8,000 published studies, that implicate a single "smoking gun" molecule in the rise of over 36 CDDs to news agencies, some members of congress, the president, etc., he got a big, fat ZERO response!⁷ This, amongst other such failed efforts to truly inform/reform healthcare to handle the avalanche of CDDs, has led me to believe that we need a different strategy.

As an ANH practitioner, I am fiercely dedicated to helping people get to the root of their health problems. But as noble as that sounds, it is not as easy as it might appear. It is far too easy to treat a pain in an elbow or daily headaches, without considering underlying, systemic causes of such. That can be done in eight minutes; going to the root takes way more time. Time Magazine, way back in 2004, gave the world its first look at implicating an underlying common denominator of nearly all chronic disease: inflammation.⁸ The question is, however, how do we specifically address what the average person needs to stop and start doing in order to actually get to the root of inflammation? There has to be objective ways to know and to measure progress.

Key Health Markers (KHM)s

If we don't measure and monitor our KHM)s, how can we say that we are managing our health? Even Joe and Suzy can measure and monitor some KHM)s: blood glucose, pulse test for food intolerances, body temperature, dip stick urine analysis, weight/BMI, etc. Of course, we practitioners can perform more extensive tests to help monitor progress: blood labs, organic acids, phase angle, etc. Overall, when eliminating health bandits, we should teach higher level KHM)s: waking rested? Aches/pains status? Fatigue during the day? No matter how good labs look, how people FEEL is the paramount KHM!!! Relevant and complete measuring of improvement must lie at the heart of going to the root as we explore the following nine bandits... which have guns that are actually smoking in a given patient?

The Nine Bandits Underlying and Undermining Human Health in the U.S.

Below is a brief description of the top nine health bandits that we face in mid-2019, along with a brief description of some ways to combat them, thereby restoring optimal health.

1) Toxins/Toxicity - Thousands of new chemicals appear each year. Many of these find their way into our food chain/bodies. Glyphosate (Roundup), antibiotics, plastics, birth control pills, and other medications, all appear in most water supplies. Our detox and immune pathways are under 24/7 assault. We can help counter all these by strengthening our detox and immune systems, but we must make it a priority to live and eat "clean," i.e. organic and local as possible. Monitor www.ewg.org. I have found, clinically speaking, that if people simply switch all food, household and personal care products to only

natural and organic, they can re-gain some vitality.

2) NNEMFs - Non-Native Electromagnetic Fields (Frequencies) are EMFs that are man-made, as opposed to ones that come from the sun and earth, made by God. Hundreds of studies now confirm that these NNEMFs negatively affect us.⁹

Clearly all things electrical/electromagnetic are of enormous convenience. But at what cost? At what level does the work produced outweigh the growing cost to our health? Many feel that we are at a tipping-point with this issue.¹⁰ The correlation between many of the CDDs and NNEMFs are beyond uncanny.¹¹ There is an alarming, clear, connection of the unbridled use of NNEMFs negatively affecting human health.¹²

These radiations affect our physiology in different ways. Some can be used for healing (Rife frequencies, PEMFs), but the research has shown that the EMFs used for things like smart meters, cell phones, and even an electric clock radio are harmful.¹³ It is not known exactly why some people are affected more or less by such fields. More than likely, the overall physiology, vital reserves, and metabolic balance play a big role. Due to the deeply penetrating nature and actual frequencies, long-term exposure will harm human health.

Here is a brief summary of five types of NNEMFs that you must reckon with.

- Electric Fields (EF) - The cord for your nightstand light, even if the light is not turned on, still radiates a dangerous EF!!! The same goes for an extension cord with nothing plugged into it.
- Electromagnetic Fields (EMFs) - Wiring and devices like refrigerators, lights, clock radios all radiate electromagnetic fields.
- Radio Frequencies (RFs) - Electro-magnetic radiation from things like WIFI devices, cell phones, microwave ovens, etc. Martin L. Pall, PhD, has compiled no less than 156 studies outlining the eight areas of NNEMFs physiological damage/disruption: DNA, fertility, neurology, apoptosis, oxidative stress, endocrine/hormones, intracellular calcium, and cancer.¹⁴
- Dirty Electricity (DE) - Dirty electricity is stray and toxic EMFs that feedback into your house wiring from the grid and your appliances. I refer to this as EMF "vomit." Magda Havas has demonstrated a dramatic relationship with the level of DE and various diseases such as diabetes, ADHD, MS, and more.¹⁵
- Blue Light Radiation (BLR) - The preponderance of modern lighting focuses on a narrow, "blueish" range, largely because it takes less electricity than its big brother, incandescent (filament) bulbs. We now know that blue light environments impact human biology negatively, especially when not in context with the other sister spectrums (red, etc.).¹⁶

We must be careful to not be destroyed by the tasty delights of our technological tools. Here is a limited list to help defend yourself from NNEMFs:

- Distance yourself from your mobile phone as much as possible
- Only put your cell phone to your head if someone puts a gun to the other side of your head!
- Eliminate WIFI in your home, especially in

your sleeping area; put a timer on your WIFI router.

- Shield yourself from your smart meter or move!
- Turn breakers off to your bedroom
- If you have DC to AC inverters, you are swimming in an ocean of DE (EMF vomit!); DE filters can help.¹⁷ And you probably need DE filters no matter where you live...
- Get grounded! Bed sheets and feet pads; all can help!

3) Key Nutrient Deficiencies; Sugar and Carb Overload - With food grown in depleted soils, along with glyphosate (which blocks a plant's ability to make key amino acids and promotes inflammation¹⁸), our food cannot be our medicine like it once was. Add over-hybridization and GMOs, and we have a major challenge. Bioavailability is paramount! Minerals are non-optional.

With the advent of things like GMO foods, more chemical fertilizers and herbicides and pesticides, much of our food is simply toxic, and very deficient in nutrients. And the average American's gut is leaky, provoking a firestorm of autoimmune dysfunction and physiological misery. And since a carrot does not need all the same trace minerals that humans need, a carrot commercially grown with N, P, and K fertilizer, in a fairly nutrient-empty soil, will have little, or no, selenium, iodine or other essential trace elements that we cannot thrive without. The majority of our commercially-grown food today does not have the basic building blocks that cause humans to be healthy.¹⁹

Adequate quantity and quality (whole-food derived are best) of nutrients are absolutely essential building blocks that we need in order

to thrive.

One example as to how a deficiency of one critical mineral can create a cauldron of inflammation is as follows. As far back as 1992 Weglicki and Phillips demonstrated that inducing a magnesium deficiency in rodents induced dramatic increased levels of cytokine and neurogenic inflammation.²⁰ And yet TWM and some ANH practitioners would go on a wild-goose symptom chase, when all that was needed was more bio-available magnesium.

There are around a dozen essential minerals, along with a number of vitamins, amino acids, and fats that we must have to support vital health. Being deficient in some of these while in our 20's we can often dodge the CDD bullets, but if not supplied, the body will eventually breakdown. Without adequate selenium and iodine (and it does not take much) our thyroid simply cannot function.

An Ideal Diet?

While one size does not fit all, as it turns out a close to ideal diet for most people, especially if they are trying to fight any CDD, would be as follows:

- Eat mostly plants, avoiding the Suspect Foods (below) and all other refined grains.
- Eat 1 to 2 meals per day; take all food within an 8-hour period; NO snacks! Fast often!
- NEVER OVEREAT! Studies are clear that overeating cuts-down on health-span and lifespan.²¹
- Avoid all fats and oils except olive, coconut, MCT, macadamia, avocado, and possibly butter/ghee.
- Avoid as many fungi (some mushrooms excepted) and their mycotoxins as possible -

antibiotics are fungi toxins; beer and wine are yeast urine? YUCK!

- Drink plenty of natural mineral spring/well water devoid of nasty metals and bugs: green tea, organic coffee (fungi-free!), natural lemon with stevia. Fruit juice is on the permanent "naughty" list.
- Must have some high quality, organic protein every meal (meat, fish, poultry, cheese, possibly eggs). Adequate protein from only plants, in my clinical experience, is very difficult!
- Consider leaning towards a highly ketogenic (majority of calories from fat) diet initially and then modify. Try/research 70% fat, 25% protein, 5% carbs; modify based on your KHM's.
- For your carbs, eat many servings per day of non-starchy vegetables; limit all fruit and berries, excepting avocado. Once you are certain that your blood sugar is stable and predictable, try adding some in. Green bananas, plantains, and pressure-cooked beans are a great source of resistant starch.

Of course, people can possibly lighten-up on some of the points above once they reach their health goals; best to add back in one-at-a-time then measure and monitor their KHM's.

4) Chronic and Acute Deficiencies of "Vitamins" G, N, S, W, and X - Never heard of these "vitamins?" Well, they are not vitamins in the classical sense. However, they are certainly essential for vitality.

Vitamin "G" for Earth Grounding. Barefoot on the ground is how we were created.²² Earth grounding with our feet/skin has extraordinary health benefits.²³ Up until recently we have not known why an electrical connection with the earth is so important for our health. A growing number

of studies point to a range of benefits that all have a single mechanism of action in common:²⁴ The earth supplies much needed electrons to quell various inflammatory processes due largely to oxidative stress (electron thievery). While the best would be in the ocean, bare feet on moist soil or grass, or a grounding pad, bed sheet, or ankle strap will all help to reconnect us with earth's abundant healing electrons. You must read the seminal book on this topic entitled *Earthing* by Clinton Ober.

"N" for Nature. The more disconnected from nature we become, the more we languish, gain weight, and die way too early. Yes, there is a nature deficit disorder!²⁵ Since the 1960s there has been a steady trend of less human connectivity to nature. For example, prior to 1960 synthetic sole shoe sales were less than 5% of the market, with leather soles (slightly to moderately conductive to the earth) being 95%. For a radical, visual chart that curiously correlates artificial soles with diabetes, see page 86 in the book referenced above: *Earthing*. Sights, smells and positive microbiome are all benefits of getting out in nature and getting more of nature into us. Explore *Shinrin Yoku*.²⁶

"S" for Sunshine. Simply put: humans thrive in the sun; they don't when stuck indoors. This point has to be stressed because most modern life has erased this "vitamin" from our lives. Sunshine synthesizes vitamin (actually a hormone!) D in our body. It also recalibrates our circadian rhythm, helps hormonal health, and supports our mitochondria and immune systems.²⁷ And so much more.

You don't want to get a sunburn, because sunburns do damage our skin and DNA, but it's time to break free from the outdated and false belief that the sun is our enemy. Sun-phobia has been

fomented by an industry (sunscreen). From this industry's perspective a parent would be crazy, bordering on child abuse, to not slather their child down with sun-protective lotion.

While there is a clear relationship between people with skin types that are prone to burn and an increase in skin cancer rates,²⁸ nevertheless ALL people need more sun!

"W" is for Water. We must have adequate hydration. While distilled or RO water can help in a detox regimen, our water should have some minerals in it. Peeing "clear" does not necessarily mean we are well-hydrated, however. Start with half your body weight in ounces; 150 lbs = 75 ounces per day.

"X" is for eXercise! We all know that our bodies need to move... as much as possible for great health. But most folks either under- or overdue exercise. It has been said that sitting is the new smoking. Though smoking does more extensive damage to human physiology, non-activity contributes to so many aspects of CDDs, we are not going to discuss them here! Many things since the 1960s have discouraged physical movement: Cars, visual entertainment, non-agrarian careers, etc. The bottom line is we MUST move, smartly (marathons are suicide!) and often!

Context connectedness describes how created beings thrive in their living environment. A fish out of water does not live for very long due to being out of its context. Similarly, a human who spends most of its sleeping hours isolated from earth in a sheetrock box, immersed in an ocean of NNEMFs is disconnected from its context. Then, that human gulps down a nutrient-deficient breakfast, followed by lots of coffee (candy bar in a cup?), transported in a 100% artificial metal

tube (vehicle) that is lined with non-natural, noxious-fume-emitting material... and more NNEMFs (cell phone, alternator), and being completely insulated (electrically) from earth. The bulk of the rest of that human's life is spent in another sheetrock cubicle for at least eight hours.

Humans were created, by God, barefoot, naked and in a garden surrounded by nutrient-laden food. Taken out of that context, more and more, as we shift from a microbially-rich, sun-filled, earth-grounded outdoor environment to a sunless, ubiquitously-toxic, sterile, and artificial indoor one, humans might survive, but have a difficult time actually thriving. Outside of this context, we are literally fish out of water.

In most of the developed world this is exactly what we see.

Do we really need 500 double-blind, placebo-controlled clinical studies to affirm that most of us have grave deficiencies of vitamins G, N, S, W, and X? Seriously!

Here is a list to help you get your RDA of Vitamins G, N, S, W, and X:

- Go outside, barefoot on soil, grass or concrete as much as possible (asphalt doesn't count); walk and hike!
- Get an earth-grounding sheet for your bed, and a pad for your feet; see www.earthing.com for some highly recommended solutions.
- Sit under a tree or bush and read a book (with bare body on the ground!)
- Walk through a forest or park... forest "bathe;"²⁹ barefoot is bonus!
- Swim in streams, ponds, lakes, and the ocean...a super way to get necessary minerals such as magnesium.³⁰
- Get more sun! Even less than 15 minutes of

direct sun a day with as much skin showing (without offending the planet!) has been shown to allow the body to produce Vitamin D.³¹

5) Magnesium, Iron and Copper Dysregulation

- Stunning research has concluded that one of the biggest culprits at the root of nearly all CDDs has to do with misplaced or overloaded iron and copper deficiency, along with a few other key nutrients, especially magnesium. Added iron to our food supply is literally poisoning us.³²

One bad habit that nutritionists and TWM or ANH practitioners have is to look at individual nutrients in isolation, without considering the critical and synergistic role that others play in the designed symphony of mineral interactions. A clinician might look at a person's ferritin level and conclude that it is in the normal range, but this is not always the entire picture without considering copper, which is critical for iron regulation. Both severe iron deficiency anemia (IDA) and iron overload (IO) present with many of the same symptoms. The standard procedure of TWM has been that if a person is suffering from fatigue, and if ferritin levels are low, to prescribe more iron. Unfortunately, once a medical tradition has been entrenched, it is difficult to convince doctors otherwise. Pouring more iron into an inflamed body, without considering other factors, is merely exacerbating inflammation at best and inducing horrific symptoms, at worst.

As a recent clinical example of this iron/anemia confusion, I have been working with an elderly woman who has fallen victim to TWM-induced iron overload. Based on some partial blood labs showing IDA, (conventional ranges are not at all adequate to address this most critical health bandit), her primary care physician prescribed a plethora of iron-rich foods and iron supplements.

On the conventional "surface," this all seemed good. However, she kept having symptoms that pointed to IDA; all the while her free iron was accumulating. Current labs indicated, by more accurate research standards for iron in the literature, that she was also in IO. It is generally thought, by erroneous TWM traditional standards that more iron meant less anemia. However, in the case of this subject woman, her amino acid vital reserves were so poor, she could not even make proper hemoglobin (Hb). As you might recall from biochemistry, a vastly simplistic formula of hemoglobin might be: $Hb = \text{heme} + \text{globin}$. Where the heme contains the iron part and the globin represents the protein "carrier." Without proper protein synthesis of the globin part, the iron is orphaned. Orphaned, "free" iron is destructive to human physiology and leads to inflammation, via oxidative stress. Most of us have way too much iron and/or misplaced iron due to ceruloplasmin/copper dysfunction.

One of my recently adopted big-brother heroes, Morley Robbins should probably get a Nobel prize for his work on this topic. I stand on his shoulders. I beg you to go to www.rcp123.org and read and listen to all his work and interviews.

Here is a MUST list for Mg, Fe, and Cu dysregulation:

- Go donate blood
- Get a current set of blood labs - see <https://therootcauseprotocol.com/order-lab-tests/>
- Start the Root Cause Protocol - see www.rcp123.org

6) Suspect Foods that Clearly Contribute to the Rise of CDDs. Many of these foods have been considered healthy in the past. And some might be just fine for you. They will be exposed for what they really do to contribute to obesity,

autoimmunity, CVD, diabetes, etc. Many of these so-called "natural" foods are our arch-enemies! Perhaps this wasn't the case in the distant past, but clearly we live in a very different world than just a hundred years ago. In fact, when I was growing up in the 60's and 70's, I ate Wonder bread with Oscar Meyer bologna and Miracle Whip sandwiches (gross, by my healthy standards today). In my day there was no gluten sensitivity or ADHD; there might have been one autistic child in my entire school district. Peanuts and strawberries were eaten by all kids, except a rare few. An overweight kid in my grade was the exception. I want to emphasize that if you have any CDD, unless you have a lot of money for expensive tests,³³ then stop these now and don't start them up until your KHMs improve.

Here is my list of the Suspect Foods:

Corn - Spikes blood sugar, contains alkaloids that are inflammatory, can cause leaky gut, and is implicated in diabetes and autoimmune diseases. One writer has called corn, the "new gluten."³⁴ When farmers want to fatten up their cattle, guess what they feed them? Yep.

Peanuts - Ninety-four percent of all people possess an antibody against peanut lectin.³⁵ This means that when you eat a peanut it is game-on for your immune system. Any food value that a peanut might have will generally be outweighed by the inflammatory stress it induces. Go with skinless almonds, macadamia nuts, hazelnuts, walnuts, pecans, hemp seeds and pistachios instead.

Gluten - laden foods - The modern strains of barley, rye, oats, and wheat especially, with the state of chemicals and our collective permeable guts, puts them on the permanent naughty list. Just say "no."

Nightshade vegetables - Tomatoes, potatoes, peppers and eggplant all contain alkaloid lectins that stress many peoples' immune systems.³⁶

Eggs - Eggs can be a perfect food! However, If you have a serious CDD, eggs could be a kryptonite for you.

Dairy - Especially type A1-Casein milk protein which creates a firestorm for immune, neurological, and endocrine systems.³⁷

Refined Sugars and Artificial Sweeteners - No comment necessary here! Just say "no."

Soy - As JJ Virgin says, "There is no joy in soy." Just say "no."³⁸

Lectins - Stop right now, go to your Amazon account and do the one-click on Dr. Gundry's The Plant Paradox. He has un-masked this bandit for what it really is.

These foods, from my clinical experience and also from the experiences of my some of my heros (Dr. Gundry, JJ Virgin, Dave Asprey, Dr. Laurens Maas, Dr. Mark Hyman, etc), are to be at least eliminated entirely for many months, until you reach your health goals. Dr. Gundry, for example, a mentor of mine, has clinical experience of hundreds of patients with nearly every autoimmune disease you can imagine going into complete remission simply by eliminating many of the Suspect Foods above and supporting the gut.³⁹ His books The Plant Paradox and The Longevity Paradox are golden. The above foods produce measureable markers in blood labs; that is, if one or more of these are creating a physiological stress storm in your body, the lab markers will tell.

7) Sleep - This bandit has robbed most people over forty years of age for too long now. About a third of Americans suffer from sleep disorders; and there are about 70 different ones.⁴⁰ The challenge here is if we don't sleep, we do not heal. Period.

Here is a list to help restore sleep:

- Get to bed before 10:00 PM
- Try taping your mouth shut with 2" 3M surgical tape; I'm not kidding! 9 out of 10 folks whom I suggest this to, once they have tried it for a week, would not dream of going to bed without mouth taping!
- It is critical to calibrate your D and B vitamins; learn from my sleep doctor mentor, Dr. Stasha Gominak; she has mastered this area! www.drgominak.com
- No blue light or food for 4 hours prior to bed time
- Turn your electric breaker off to your bedroom
- Cellphone and WIFI off
- Use a grounding sheet (see vitamin G above)
- Some more good tips here: <https://www.healthline.com/nutrition/17-tips-to-sleep-better#section7>

8) Leaky and Dysbiotic Gut - A number of factors over the last 40 years have contributed to our microbiome (gut buddies) being out of control. When we are not in synchrony with the other 90% of the genetic material that comprises US (gut et al microbes), we suffer an increase in CDD. Nearly all allergies, sensitivities, and intolerances start here.⁴¹

Research now shows that humans are far outnumbered, genetically speaking, by trillions of necessary bugs. When I was growing up in the 1960s my mom taught me to not get my hands

and feet dirty; germs were the enemy. Back then we were still fighting infectious disease, mumps, rubella, and even polio. Recent book titles such as *Eat Dirt* by Josh Axe and *The Dirt Cure* by Maya Shetreat-klein betray the fact that we now know that many bacteria, fungi, viruses and even other so-called parasites are necessary for we humans to thrive. As it turns out, there may not even be "bad bugs." It is quite possible that we need them ALL. But when certain species overpopulate (feeding c. albicans its favorite food: sugar) or get into the wrong place (SIBO), then we suffer metabolic imbalance.

It is no surprise then that upper respiratory diseases are in meteoric increase as well. We have heard of leaky gut... what about leaky sinuses and brain? From head to toosh we have become leaky largely from ubiquitous toxins like glyphosate. But even antibiotics, NSAIDs, aspirin, and some Suspect Foods can contribute to leaky membranes, especially if any of these provoke an autoimmune response wherein, like Crohn's, the immune system helps to dismantle gut tissue.

Some tips to heal our guts:

- Consider Sovereign Labs colostrum
- Consider L-Glutamine
- Consider Immuno-Synbiotic pro-biotics by www.nutri-spec.net
- Make your own wild-fermented vegetables or buy organic, non-pasteurized ones.
- Eat more resistant starch to keep your gut buddies happy.⁴²
- Perform gut pathogen tests if the above does not heal the gut

9) Un-relenting Stressors - All the health bandits listed above are stressors. Psychological stress is at an all time high. Many

of the modern stressors are a big reason why immune, neurological and endocrine systems weaken and fail. Stress threatens homeostasis and is provoked by physiological, emotional or external stressors; this process then fires up our sympathetic nervous system (SNS) and the hypothalamic-pituitary-adrenal (HPA) axis, and the cascade of events those entail. Multiple doors then open for diseases. According to recent research, chronic inflammation is one result of relentless stressors.⁴³

Being mindful of the previous 8 bandits will provide some chill to your overall stress, for sure.

But I find, that for many people, the most important stress to overcome is the sense of purposelessness and lack of love. When we know that our life has great meaning and purpose, then some suffering not only makes sense, but one can embrace that suffering better. Your SNS and HPA can relax and not live in the flight-freeze-fight-fright mode. When you know that God created you because of His love for you⁴⁴ and that you have meaning and purpose,⁴⁵ this provides motivation to press on even when things get hard. When you know that "God has your back,"⁴⁶ because you have given Him your heart, this is a complete game changer. With the One who has "Created the heavens and the earth" on His resume, who would not want to partner with Him? When you know you are loved and forgiven, then you can love and forgive all who betrayed you and stole from you.

Now that is stress-relief!

Conclusion

For nearly thirty years, since around 1990, the health of the U.S. population has been challenged like never before. Up to 1990, starting in the

late 1800s, amidst a growing backdrop of key nutrient deficient, toxin-laden, and processed foods, increasingly toxic environment, a swarm of nefarious NNEMFs, a steady disconnect from nature in general, and the continual, legislated mandate of iron added to the food supply, the average middle-aged person has had a hard time just maintaining reasonable health. Getting a good night sleep became a challenge due to a rapid increase in new stressors, noxious light (fluorescent, CFL, LEDs), and a paucity of critical nutrients such as magnesium. Of course, the steady rise in prevalence of the two wicked cousins, fructose (sugars in general) and oxidized vegetable oils, only poured "gasoline" on the chronic disease fires. After around 1990, the gates of biological hell were opened by allowing glyphosate to be sprayed directly on crops, personal-carry cellular phones increased, antibiotics of every imaginable kind became ubiquitous. The human microbiome and physiology reach a breaking point. One common pathway of all the above is electron banditry (AKA oxidative stress). There is really only one true underlying cause of disease: Cells that malfunction. Cells malfunction due to deficiency, toxicity, and miscommunication (disconnectedness). The above Nine Bandits all contribute directly or indirectly to cellular malfunction. Malfunctioning cells then manifest in any of the 12,500 disease symptoms that people experience, due to our own unique biological individuality. This results in over 170 million Americans being affected with at least one of the CDDs that are germless and have no cure via the TWM system.

Here's some biological "math" in a nutshell:
 [increasing toxins, especially glyphosate]
 + NNEMFs - essential nutrients - [vitamins (G+S+N+W+X)] + [(Mg+Fe+Cu) dysregulation]
 + 9 Suspect Foods - restorative sleep - thriving

microbiome + relentless stressors = 36 CDDs that have doubled since 1990.

Say this number over and over: \$2.77 trillion dollars. That's the cost of neglecting the truth and reality of the above conclusion.

The salient question that we must keep asking is, "What thing(s) changed in the course of just a few decades that would unloose a collective plague of CDDs?" The human body is designed to operate without ceasing in order to maintain homeostatic and thriving vitality. We must stop certain things and start others as a result of environmental stressors that have been introduced in the last few decades, in order to help facilitate what our body insatiably wants to do.

If you asked me, "What do I have to do to be healthy until the age of 100," here's what I would say,

- Take pure water (Vitamin W!), with minerals, as your only beverage; some teas/coffee ok.
- Avoid all the Suspect Foods unless proven they are not an immune stress
- Get daily mega-doses of "vitamins" G, N, S, W, and X.
- Create a toxin-free home environment
- Take whatever measures necessary to create an NNEMF-proof environment
- Eat only known organic food (local whenever possible); grow something!
- Get the essential nutrients... whole food and highest quality supplements
- Clarify, calibrate and rehearse your purpose for showing up on planet earth. This is stress-relief and a deep well of peace, joy, and hope.
- Do anything and everything to experience and guard deep, restorative sleep.
- Declare war on iron/copper dysregulation. Subject to blood lab testing, donate blood

many times per year. Follow the Root Cause Protocol (www.rcp123.org) in some customized form.

- Try to eat all food in two meals and within an eight-hour period of time
- Get at least some quality protein every meal
- Get more out into nature and get more of nature into me. Walk, hike, and hang out in forests, and natural environments. Make home-made, wild-fermented foods like sauerkraut.
- Continue to refine my love relationship⁴⁷ with God, my creator⁴⁸, architect and friend⁴⁹ and learn how to better love all people.⁵⁰

These things are exactly what I am committed to for myself. As a clinician, these are exactly what I encourage my clients to do as well.

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² https://www.researchgate.net/publication/303673576_The_Root_Cause_in_the_dramatic_rise_of_Chronic_Disease

and <https://searchforcause.com/a-new-era-of-disease-did-we-miss-the-memo/>

³<https://newsnetwork.mayoclinic.org/discussion/nearly-7-in-10-americans-take-prescription-drugs-mayo-clinic-olmsted-medical-center-find/>

⁴<https://www.cdc.gov/chronicdisease/resources/infographic/chronic-diseases.htm>

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⁶Lear, Richard. (2016). The Root Cause in the dramatic rise of Chronic Disease. https://www.researchgate.net/publication/303673576_The_Root_Cause_in_the_dramatic_rise_of_Chronic_Disease

⁷<https://searchforcause.com/a-new-era-of-disease-did-we-miss-the-memo/>

⁸ <http://content.time.com/time/>

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¹⁰<https://bioinitiative.org/conclusions/>, <https://www.saferemr.com/2018/04/recent-research.html>

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¹³<https://www.defendershield.com/learn/studies>

¹⁴Pall, Martin L. 2018 5G: Great risk for EU, U.S. and International Health! Compelling Evidence for Eight Distinct Types of Great Harm Caused by Electromagnetic Field (EMF) Exposures and the Mechanism that Causes Them. Book available for download.

¹⁵<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2557071/> and <https://www.ncbi.nlm.nih.gov/pubmed/17178585>

¹⁶<https://www.health.harvard.edu/staying-healthy/blue-light-has-a-dark-side>

¹⁷<https://emfacademy.com/dirty-electricity-filter-guide/>

¹⁸<https://zachbushmd.com/wp-content/uploads/2017/04/Glyphosate-Article-for-Holistic-Primary-Care-3-21-16.pdf>

¹⁹<https://www.scientificamerican.com/article/soil-depletion-and-nutrition-loss/> and <http://www.worldwatch.org/node/5339>

²⁰<https://www.ncbi.nlm.nih.gov/pubmed/1384353>

²¹<https://www.sciencedaily.com/releases/2017/09/170914084035.htm>

²²Genesis 1-3

²³<https://www.barefoothealing.com.au/v/what-is-earthing/22>

²⁴<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3265077/> and <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4378297/>

²⁵<https://www.childrenandnature.org/about/nature-deficit-disorder/>

²⁶<http://www.shinrin-yoku.org/shinrin-yoku.html>

²⁷<https://www.linkedin.com/pulse/time-rethink-your-truth-sun-jack-kruse/>

²⁸<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3046902/>

²⁹<http://www.shinrin-yoku.org/shinrin-yoku.html>

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⁴⁵Ephesians 2:10

⁴⁶Chronicles 16:9

⁴⁷Deuteronomy 6:5; Matthew 22:37; Revelation 3:19-21; John 15:12-14

⁴⁸Colossians 1:16; John 1:3; Genesis 1.

⁴⁹John 15:1-17

⁵⁰John 2:1-11



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A Word from the Frontline, on Lyme

By: Arthur Gertler MD

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Because chronic Lyme disease is one of the most prevalent infections in America, it behooves all health practitioners to develop skills in addressing this most vexing health issue and to support efforts at research and development to eliminate it from the population. Understanding the scope of this issue is paramount to our concerns as reliable estimates from indigenous regions reveal that actually 20%-30% of local populations have Lyme antibodies based on Western Blot lab testing. Much of this is silent, making routine screening of the entire population an epidemiological necessity to adequately address this health issue. Only about 3 million cases have been identified, but the true number is much, much higher, because of low levels of reporting and the fact that many cases are silent. This alone earmarks chronic Lyme disease as a national health crisis which deserves focused and intense attention from all health agencies and practitioners.

Of the 2 presenting clinical phases, acute

and chronic Lyme disease, the acute has had by far and away more attention. Tick bites heralded by erythema, migraines, rashes later are not as common an expression as once thought, with many more presentations of acute and chronic disease absent these features. Ticks should be removed carefully and fully to avoid transmitting their secretions into the tissues, and sent for analysis mainly in the very young and very old who may need modified dosages of either antibiotics or herbs. Standard antibiotic recommendations of doxycycline and amoxicillin regimens for 3 weeks have been shown to be inadequate to completely eradicate the *Borrelia burgdorferi* spirochete in studies performed 6-9 months later. More effective herbal regimens are now being recommended using the Buhner protocol (Andrographis, cat's claw, Japanese knotweed), high dose Echinacea and Lymeplexplus in combination for about 3 weeks. An ounce of prevention applies wholeheartedly here to avoid prolonged regimens and patient suffering. Tick

sprays with multiple essential oils, tick checks and environmental controls are essential to a Lyme free existence, and will, to some extent, calm anxiety about risk of walking in nature.

To address those with typical rashes following tick bites, a 3-month course of antibiotics has been previously recommended using at least 2 forms, doxycycline, Biaxin, Ceftin, amoxicillin, or azithromycin for the intracellular form, and Plaquenil or thienamycin for the cyst form. Candida overgrowth in the bowel frequently accompanies this which may be addressed with herbs or in some cases, further antibiotics as nystatin or Diflucan. This is not ideal because of the development of antibiotic resistance and therefore persistence of the bug, as well as side effects and altered colonic microbiome, but may allay symptoms well. More often we are recommending herbal approaches here consisting of Lymeplexplus for about 3 months. Addition of Buhner protocol and colloidal silver to the regimen may be helpful as well. After completion of treatment course, blood testing and individual body testing using applied kinesiology or its equivalent, should to be routinely considered to assure full clearance of the spirochete. We recommend IGXSpot (IGeneX), or CD57 (IGeneX) or iSpot Lyme with these specialty labs than standard medical labs for better accuracy in the range of 90%.

There may be occasional false negatives even with these, making individual testing as mentioned above an important addition.

Antibiotic regimens, it should be noted, must address both Lyme and any additional coinfection present, diagnosed by blood testing and clinical presentation. Herbal regimens as Lymeplexplus serve to not only cover Lyme, but all coinfections as well. Buhner protocol covers only Lyme, with addition of artemisinin and Cryptolepis for Babesia, boneset and resveratrol for Bartonella, and colchicine and astragalus for Ehrlichia. Simpler regimens produce better compliance so that we tend to prescribe Lymeplexplus more often as a single agent.

Clinical presentations of acute Lyme may involve fever, headache, sweats, flu like symptoms and rash. Occasionally acute psychosis, anxiety, depression, acute meningoencephalitis, acute carditis, facial palsy (Bell's palsy) may present as well, sometimes requiring acute hospitalization. It has been claimed by health care workers in New England, a highly endemic area for Lyme, that the majority of psychiatric patients hospitalized for depression test positive for Lyme disease. For the more severe acute syndromes, intravenous antibiotics using doxycycline or ceftriaxone are recommended until symptoms clear.

Acute Lyme disease is much easier to treat than chronic Lyme disease which poses a quite a formidable situation for not only the patient but the practitioner as well. Chronic Lyme is seen much more commonly than acute Lyme. Patients have usually been symptomatic for 3-10 years, often having coinfections and autoimmune diseases accompanying the Lyme, and have been frustrated with many ineffective approaches over the years. Fatigue, brain fog, arthritis and neuropathy are the classic syndrome making chronic Lyme easy to diagnose, but not infrequently only part of the syndrome is present such as chronic fatigue or arthritis. Testing with Western Blot, Immunoblot, CD57 or IGXSpot or iSpot Lyme is vital. False negatives even in the best of hands should not deter a practitioner from recommending Lyme treatment as long as there is a tight clinical fit of symptoms. Many individuals with Alzheimer's disease, multiple sclerosis, Parkinson's disease, ALS, rheumatoid arthritis, Lupus, scleroderma and chronic fatigue syndrome have been shown to have Lyme disease as the underlying cause and should be screened for such. The decision to treat is usually straight forward but choosing the most appropriate of the many options available may be somewhat vexing.

If general treatments which cover all coinfections are not used, then specialized testing for coinfections is necessary using

the more accurate specialty labs such as IGeneX and Fry labs. One or more coinfections are present in about one half of all patients, including most commonly Babesiosis (similar to malaria, etiology protozoan), less commonly Bartonella (similar to cat scratch fever, etiology bacterium), and least commonly Ehrlichia (similar to Rocky Mountain Spotted fever, etiology bacterium). Babesiosis causes night sweats, fever, headache, brain fog and air hunger. Bartonella causes personality changes, rages, gastrointestinal symptoms, red striae on chest and abdomen, morning pain on soles of feet, and eye pain and sarcoidosis, and Ehrlichiosis causes muscle and joint pain, fever and depressed white blood cell and platelet counts. Coinfections in half of all patients are silent. A dictum in Lyme management is that all coinfections must be recognized and treated in order for the Lyme treatment be successful. This often leads to the use of a panoply of antibiotics addressing the Lyme, the Lyme cyst and all coinfections. Most often, antibiotic resistance, side effects and candida overgrowth make long-term antibiotic use for the duration, difficult. Treatment courses are commonly 1-2 years in duration. Rotation and pulsing of antibiotics are commonly employed. Herxheimer reactions may be addressed by reducing dosages or temporarily stopping them, and are experienced in about 90% of patients.

Better tolerated and more effective alternatives involve the use of herbal and energy modalities for which there are many options. Buhner protocol mentioned previously, Cowden protocol, colloidal silver, Rife machines, BioCharger, ozone, hyperbaric chambers (HBOT), and biofeedback machines as well as many other herbal options are all valuable alternatives and when used in combination will often produce superior results than antibiotics alone, and can often lead to complete clearing of the infection. Additional training is necessary for these and cost may be a factor. Orasal, a natural product containing Salicinium and 3 other supplements, is an effective Lyme treatment, with few side effects, and addresses all coinfections, but is not compatible with ozone, vitamin C and artemisinin. It too must be given for extended periods like antibiotics, and may be used in conjunction with them, which may speed recovery.

All anti-spirochetal regimens must be initiated stepwise, one at a time, in order to minimize Herxheimer reactions. Supplements are often necessary to resupply demand involving fish oil, NAC (n-acetyl cysteine), alpha lipoic acid, probiotics, saccharomyces boulardii (yeast probiotic with antibiotics), grapefruit seed extract for cyst stage, vitamin D3, multivitamins with minerals and Serrapeptase for biofilm. Improvement

is generally seen after 3-4 weeks with treatment courses lasting about 1-2 years varying with the individual. Periodic follow up with changes to the regimen are often needed. Combination therapy is more effective and may often shorten the course to remission.

A natural therapy which appears to be in a class by itself for efficacy, is a supplement Lymeplexplus. This alone has demonstrated near 100% effectiveness for controlling Lyme disease in our hands, has no known side effects, and is compatible with all other therapies. Herxheimer reaction rate is reduced compared to other agents, and most importantly, the observed treatment course is only 2-4 months for most individuals, unless there are chronic neurologic sequelae involved. We often observe dramatic symptomatic improvement with this agent in a matter of a few weeks. This is a marked improvement over the ordinary 1-2 year courses with all other approaches and is a significant advantage in using this agent. Its components include enzymes, proteins and amino acids with further detailed analysis available on line. In addition, other salient features include its ability to fight coinfections and candida as well as autoimmune disease often seen in conjunction with Lyme. This appears to be a new frontier in our Lyme armamentarium and if experience breeds true to form, will likely replace most other modalities in our

hands. It is also compatible with all other therapies.

A short note about treatment failures. Unrecognized coinfections, reinfection, poor compliance, ineffective regimens, and incompatible regimen combinations explain most of the treatment failures seen.

As with other maladies, spiritual and energy approaches involving shamanism, Charismatic healing, acupuncture, and prayer circles have their place and have all had the test of time. And in closing, it should be our supreme goal to urge as many as possible to become politically active in demanding that action be taken to focus research and development in Lyme disease, and mandatory training for all practitioners so that one day Lyme disease may be relegated to the fate of polio and smallpox—a disease of yesteryear.

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Allostatic Load's Impact on Health Status and Adaptogens as Natural Health Promoting Agents

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Abstract

Allostatic load represents a key factor in pathogenesis. When left unaddressed, chronic physical and mental illness may develop hindering the individual's functionality and affecting his/her quality of life as well as that of his family. In response naturopathic interventions like phytotherapy and the use of adaptogens in particular should seriously be taken into account both in chronic illness management as well as prevention. Adaptogens may be able to assist the organism cope with allostatic load and potentially prevent the development of illnesses. An example of three (3) adaptogens, *Eleutherococcus senticosus*, *Curcuma longa*, and *Withania somnifera* shows the pertinence of these and other plants in healthcare.

Keywords: Allostatic load; chronic illness; adaptogens; *Eleutherococcus senticosus*; *Curcuma longa*; *Withania somnifera*

Resumen

La carga alostática representa un factor clave en la patogénesis. Cuando no es abordada, se pueden desarrollar enfermedades crónicas, tanto físicas como mentales que afectan el funcionamiento del individuo, así como su calidad de vida y la de su familia. En

respuesta, las intervenciones naturopáticas como la fitoterapia y el uso de adaptógenos debe ser seriamente tomada en consideración tanto en el manejo de condiciones crónicas, como en la prevención.

Los adaptógenos pueden asistir al organismo a manejar la carga alostática y potencialmente prevenir el desarrollo de enfermedades. Un ejemplo de tres (3) adaptógenos, *Eleutherococcus senticosus*, *Curcuma longa* y *Withania somnifera*, demuestra la pertinencia de estas y otras plantas en el cuidado de la salud.

Palabras clave: Allostasis; Carga alostática; enfermedad crónica; adaptógenos, *Eleutherococcus senticosus*; *Curcuma longa*; *Withania somnifera*

Introduction

After many years of significant scientific progress in treating acute illness, modern medicine faces a conceptual and financial stalemate caused by an epidemic of chronic disease (Diamond, 2009). This has led clinicians and researchers alike to take a look at Complementary and Alternative Medicine (CAM) as important factors in treating different conditions. At present, natural products in general and medicinal plants in particular, are considered an important

source of new chemical substances with potential therapeutic efficacy (Sharadha, Joel, Prathyusha, Krishnamohan, & Uma Maheswara Rao, 2014). In fact, herbal products and nutritional supplements are used often as direct substitutes for conventional drugs with the distinction that in most cases the use of natural medicines involve the promotion of the healing process rather than symptom suppression (Murray, & Pizzorno, 2012). This is the case of Adaptogens, which are categorizes plants that improve the non-specific response to and promote recovery from stress (Head, & Kelly, 2009). They have become a feasible option in the management of allostatic load and treatment of chronic physical and mental illness.

It was in the 19th Century that Botany detached from medicine, with phytotherapy being essential at the therapeutic arsenal at the time (Ferreira, Moreira, Cária, Victoriano, Silva, & Magalhães, 2014). Interestingly, natural products, which have evolved over millions of years, have a unique chemical diversity resulting in diverse biological activities and drug-like properties that play a pivotal role in many drug development and research programs (Yuan, Ma, Ye, & Piao, 2016). However, even though Medicine is no longer making use phytochemicals, Naturopathy never relinquished its use as an indivisible part of naturopathic practice.

Within the scope of Naturopathic practice the World Health Organization ([WHO] 2013) points out that there is a strong consensus on seven core naturopathic modalities: a) clinical nutrition and diet modification/counselling, b) applied nutrition (use of dietary supplements, traditional medicines and natural health care products), c) herbal medicine, d) lifestyle counselling, e) hydrotherapy, f) homeopathy, including complex homeopathy and g) physical modalities based on the treatment modalities taught and allowed in each jurisdiction including yoga, naturopathic manipulation, muscle release techniques. Nonetheless, the two (2) most implemented modalities in Naturopathic practice are nutrition and phytotherapy (herbology or herbal medicine). With mounting research in the fields of psychology and neurology, these two have

demonstrated to be powerful adjuvants in managing allostatic load and improving physical and mental functionality.

Homeostasis, Allostasis and Allostatic Load

All organisms are in a state of dynamic equilibrium or homeostasis which is constantly challenged by internal and external aversive stimuli known as stressors (Ray, Gulati, & Anand, 2016). The concept of homeostasis originally articulated by the French scientist Claude Bernard, MD, in his studies (Diamond, 2009) of the maintenance of stability in the internal milieu of the body (*milieu intérieure*) (Goldstein, 2008; Diamond, 2009). Homeostasis refers to the balanced functioning of physiological processes that maintain the internal constants of the organism (Frenquelli, 2003). Homeostatic mechanisms tend to resist a change of state (Diamond, 2009) which is a challenge given the many physical, emotional, psychological, spiritual, social, and economic changes individuals face on a daily basis.

The adaptation mechanism has its individual expression in each species or in each member of the same species (Carvalho, 2007). Stress responses have evolved from the original “fight or flight” mechanism, designed to protect from imminent physical danger (Head et al., 2009). The allostasis mechanism evolved over eons promoting an efficient matching of resources to perceived or anticipated need enabling organisms to survive to sexual maturity contributing to survival of the species (Diamond, 2009).

Resistance to stress and survival depends on adaptability and the thresholds that determine an organism’s innate tolerance to a particular level of stress (Panossian, 2017). Physiological changes associated with stress response (fight or flight) include increased blood pressure, heart rate, and blood sugar (Head et al., 2009). Blood glucose, oxygen tension and pH are examples of analytes regulated by homeostatic principles (Diamond, 2009). Chronic exposure to psychological stress results in chronic engagement of the fight or flight mechanism (Head et al., 2009). Chronic allostatic activation results in wear and tear on homeostatic



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stress mechanisms, which over time results in a compounding of allostatic load (Diamond, 2009).

Allostasis can be defined as “stability through change” (Karatoreos, & McEwen, 2013). However, it is far more complex than that. It refers to the integrative adaptive processes maintaining stability through change, which is not within the normal homeostatic range (Koob, & Le Moal, 2001). A dynamic regulatory process in which homeostatic control is maintained by an active process of adaptation during exposure to physical and behavioral stressors (McEwen & Gianaros, 2010). It is important to notice that both homeostasis and allostasis aim to maintain balance, the former in a stable manner and the latter through change. However, even though allostasis seems very similar to homeostasis, it places emphasis on the flexible adaptation process to changing environments or stressful challenges (Logan, & Barksdale, 2008). Mediators like cortisol or adrenaline are released to promote adaptation (Ray et al., 2016).

Allostatic load, on the other hand, is the consequence of alldynamic regulatory wear-and-tear on the body and brain promoting ill health that involves the consequences of stressful experiences as well as the alterations in lifestyle that result from a state of chronic stress (McEwen et al., 2010). The concept of allostatic accommodation is essentially related, however different from allostatic load, because ongoing stress process requires a much higher level of specificity about the underlying mechanisms of allostasis (Ganzel, Morris, & Wethington, 2010). Allostatic load arises from allostatic accommodation; increases in blood pressure are adaptive as a short-term response (allostatic accommodation) to a current stressor but maladaptive if sustained (via accrual of allostatic load) (Ganzel et al., 2010). When stress mediators such as cortisol or adrenaline are not turned on adequately during stress, are not shut down after it, or when there is overuse, it leads to “allostatic overload” (Ray et al., 2016) and pathogenesis.

Chronic Physical and Mental Illness

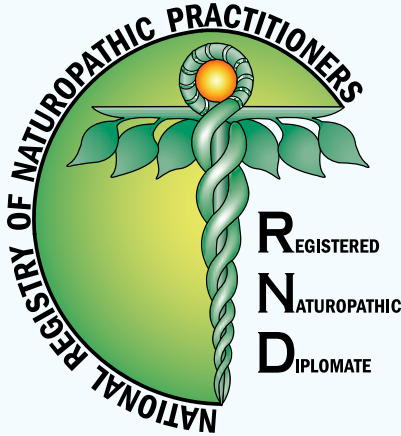
Chronic stress may cause physical, behavioral and/or neuropsychiatric manifestations: anxiety, depression,

executive and/or cognitive dysfunction; neurovascular degenerative disease; cardiovascular phenomena as hypertension; metabolic disorders like obesity, the metabolic syndrome, and type 2 diabetes mellitus; atherosclerotic cardiovascular disease; osteopenia and osteoporosis; and sleep disorders (insomnia or excessive daytime sleepiness) (Chrousos, 2009). At a clinical level, the effects of stress on the brain do not necessarily constitute permanent damage and are amenable to recovery, preventative strategies, and interventions that include pharmaceutical agents and lifestyle factors such as exercise, dietary changes, and social support (McEwen et al., 2010). Chronic illness is a major health challenge facing all countries (Homer, Hirsch, & Milstein, 2007). Individuals with chronic conditions frequently have to adjust their aspirations, lifestyle, and employment (Turner, & Kelly, 2000). According to Xu, Murphy, Kochanek, Bastian and Arias (2018) in the United States, the 15 leading causes of death in 2016 were:

1. Diseases of heart (heart disease)
2. Malignant neoplasms (cancer)
3. Accidents (unintentional injuries)
4. Chronic lower respiratory diseases
5. Cerebrovascular diseases (stroke)
6. Alzheimer’s disease
7. Diabetes mellitus (diabetes)
8. Influenza and pneumonia
9. Nephritis, nephrotic syndrome and nephrosis (kidney disease)
10. Intentional self-harm (suicide)
11. Septicemia
12. Chronic liver disease and cirrhosis
13. Essential hypertension and hypertensive renal disease (hypertension)
14. Parkinson’s disease
15. Pneumonitis due to solids and liquids

In addition, suffering from a mental disorder has significant consequences across individual’s lives, leading to poorer educational outcomes, higher rates of unemployment, and poorer physical health (McDaid, Hewlett, & Park, 2017). Serious cases depression and other mental illnesses, such as bipolar disorder and schizophrenia, can lead to people

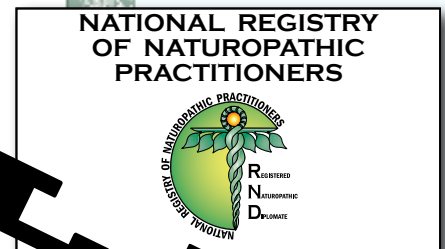
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harming themselves, or even dying from suicide (McDaid et al., 2017). At a global level, the World Health Organization (2017), estimated that for 2015 over 300 million people suffered from depression, equivalent to 4.4% of the world's population, being also the major contributor to suicide deaths, which were approximately 800 000 per year.

Comorbidity of chronic mental and physical illnesses will lead to functionality impairments, social and interpersonal interaction limitations and greater economic burdens. In addition, a significant allostatic overload as product of comorbidity will further hinder the individual's quality of life in addition to the drug-induced nutrient depletion caused by polypharmacy and economic burdens that come with it. Therefore, adaptogens are a feasible natural option to help health status and quality of life.

Adaptogens: What are they?

Since prehistoric times, humans have used natural products, such as plants, animals, microorganisms, and marine organisms, in medicines to alleviate and treat illnesses (Yuan et al., 2016). Nowadays, Complementary and alternative medicine (CAM) includes the use of herbs and medicinal plants as an alternative to conventional western medical treatment (Sethi & Singh, 2015). As complementary and alternative therapy, herbal medicine or phytotherapy, refers to the medicinal application of plant components (leaves, stems, roots, flowers, fruits and seeds) for their curative properties (Phani, Anilakumar, & Naveen, 2015), and studies the use of extracts from natural origin as medicinal or health-promoting agents (Choubey, Patel, & Verma, 2013).

Medicinal plants behave as authentic medicines since the chemical substances of which they are formed can have a biological activity in humans; reason why their joint administration with "conventional medicines" can produce variations in the magnitude of the effect (Tres, 2006). In human brains, neurotransmitters carry messages between cells and trigger responses (Cao, Cole, & Murch, 2006). Plants contain several human neurotransmitters and neurotransmitter analogues that modify human brain functions (Cao et al., 2006).

In general, herbal products contain multiple bioactive phytochemicals, including alkaloids,

steroids, terpenoids, saponins, phenolics, flavonoids, etc. and it is difficult to specify which part of the herb has biologically active for special discourse (Phani et al., 2015). Medicinal plants provide a myriad of biologically active molecules and these have been utilized in medicine for thousands of years (Kalász, Ojha, Tekes, Szóke, Mohanraj, Fahim, et al., 2018). Herbs known as normalizers support the body in natural processes of growth, health and renewal while effectors have an observable impact upon the body and are used in the treatment of specific illnesses (Hoffman, 2003). Effectors are divided into two groups: a) whole plant actions and b) effects of specific active chemicals (Hoffman, 2003).

According to Liao, He, Li, Meng, Dong, Yi, and Xiao (2018) the term of adaptogen was first proposed in 1940 by Russian scientist N. Lazarev, when he described *Schisandra chinensis* (Turcz.) Bail. and other herbs with the following definition: plant-originated adaptogens that can non-specifically the enhance human body. Adaptogens are stress-response modifiers that increase an organism's nonspecific resistance to stress by increasing its ability to adapt and survive (Panossian, 2017). Liao et al. (2018) explain that according to the primary definition of adaptogens, these substances must meet three (3) criteria:

a. must to be non-specific and must assist the human body in resisting a wide range of adverse conditions, such as physical, chemical or biological stress, including:

- a. environmental pollution
- b. climate change
- c. radiation
- d. infectious diseases
- e. interpersonal disharmony

b. adaptogens must maintain homeostasis in humans, that is, these substances can offset or resist physical disorders caused by external stress.

c. must not harm the normal functions of the human body.

Some adaptogens have been used in traditional Chinese medicine and Ayurveda for centuries to promote physical and mental health, improve the

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body's defense mechanisms, and enhance longevity (Pannossian, 2017). According to Panossian and Wikman (2010) research into adaptogens comprises the following four areas:

a. phytochemistry: isolation and structure elucidation of active constituents of adaptogenic plants

b. biochemistry and molecular biology: mechanisms of stress protective activity of adaptogens on the molecular and cellular levels;

c. experimental and clinical pharmacology: efficacy and safety of adaptogens in stress related disorders on animals and humans;

d. pharmaceutical development of herbal preparations/products that have well established medicinal use in evidence based medicine.

According to Ray et al. (2016), adaptogens

a. reduce the intensity and negative impact of the stress caused by:

a. mental tension

b. emotional difficulties

c. poor lifestyle habits

d. disease and infection

e. pollution and other factors (Ray et al., 2016).

Adaptogens normalize endocrine function through several broad and non-specific actions, and increase overall resistance to stressors; they exert unique actions on the adrenal system that promotes resistance to the negative effects of stress on the body, and support the activation and synchronization of both the neuroendocrine system and cellular energy metabolism, that are reduced by illness, physical/mental fatigue and aging (González, Olalde, Rodríguez, Rodríguez, & Duconge, 2018). They attenuate anxiogenic responses, influence CNS and immune systems/functions, and hence may be of value in life style disorders, they should be innocuous and cause minimal disorders in the physiological functions of an organism and have a normalizing action irrespective of the direction of the pathological state, as well as increase the body's non-specific resistance to internal and external stimuli and bring malfunctioning body's system back to normal function (Ray et al., 2016).

Eleutherococcus senticosus (ES), *Curcuma longa* (CL) and *Withania somnifera* (WS) Characteristics

The vast array of phytochemicals, in particular adaptogens, provides healthcare professionals with many options to address, in an integrative manner, different conditions and health challenges. In order to provide a more concrete example, three (3) adaptogens will be presented.

Eleutherococcus senticosus

Eleutherococcus senticosus

or Siberian ginseng is a medicinal plant with a long history of use by the Chinese for over 2000 years (Załoski, Olech, Galanty, Verpoorte, Kuźniewski, Nowak et al., 2016). Chemical constituents of ES leaves include hydrophilic compounds, such as organic acid derivatives, flavonoids, and triterpene glycosides (Wang, Meng, Zhai, Wang, Avula, Yuk et al., 2019). The roots of ES are source of phenols, called eleutherosides (derivatives of lignans, coumarins, and phenylpropanoids), flavonoids (hyperin, rutin, afzelin, quercetin, and kaempferol), phenolic acids, triterpenic acids, and anthocyanins (Załoski et al., 2016). ES, as well as *Panax ginseng*, seems to have a stimulating effect on the metabolism of substrates, since it significantly alters the mobilization and utilization of carbohydrates and fatty acids (Arouca, & Grassi-Kassisse, 2013).

There is evidence that ES can increase arousal, stamina and stress resistance (Facchinetti, Neri and Tarabusi (2002), and its fruit is rich source of naturally antioxidant and antimicrobial activities (Jang, Lee, Eom, Lee, Gil, Lim et al., 2016). A randomized, placebo-controlled trial carried out by Facchinetti et al. (2002) demonstrated that treatment with ES was able to reduce cardiovascular responses to stress in healthy young volunteers, while placebo was ineffective.

Curcuma longa.

Turmeric, derived from *Curcuma longa*, is a gold-colored spice that has been used as a traditional medicine (Nabiuni, Nazari, Abdolhamid Angaji, & Safayi Nejad, 2011). Turmeric extract contains major three (3) curcuminoids: a) bisdemethoxycurcumin, b) demethoxycurcumin and c) curcumin (Abu-Lafi,

Akkawi, Abu-Remeleh, Qutob, & Lutgen, 2019; Wang, Song, Gao, Bai, & Chen, 2016) with curcumin between 75% to 80%, demethoxycurcumin 15% to 20%, and bisdemethoxycurcumin from 3% to 5% (Wang et al., 2016).

Curcumin has traditionally been used for wound healing and to treat inflammatory disorders (Mahmoudian Sani, Asadi-Samani, Rouhi-Boroujeni, & Banitalebi-Dehkordi, 2016). It possesses medical and nutritional values (Choi, Kim, Hwang, Lee, Kim, Choi, et al., 2017). According to Nabiumi et al. (2011), a number of experimental studies indicate that Curcumin, as an antioxidant protects the brain against various oxidative stressors, acting as a powerful hunter of superoxide anions, and it has neuroprotective and anti-aging effects and is a strong candidate for use in the prevention or treatment of Neurodegenerative diseases including Alzheimer's disease, Parkinson's disease and Multiple Sclerosis, Ischemic cerebral stroke, epilepsy and depression.

Withania Somnifera

Withania somnifera (WS) is known as Ashwagandha, Winter cherry, Indian Ginseng, Poison Goose berry, usually grown in Indian Africa, and Mediterranean (Bhuvana, Muralidhara, Anitha, Chandra, & Vijayakumar, 2019). It is one of the most important herb of Ayurveda (Singh, Bhalla, de Jager, & Gilca, 2011). WS chemical constituents are alkaloids (ashwagandhine, cuscohygrine, anahygrine, tropine etc), steroidal compounds, including ergostane type steroidallactones, withaferin-A, withanolides-A-Y, withasomniferin-A, withasomidienone, withasomniferols A-C, withanone, etc. (Bhuvana et al. 2019). A study conducted by Birla, Keswani, Rai, Singh, Zahra, Dilnashin, et al. (2019) points to the neuroprotective activity of WS against Bisphenol A (BPA), a major endocrine disruptor, induced oxidative stress and memory impairment in mice suggesting it as a potent agent for BPA-induced cognitive impairment.

These three (3) adaptogens, represent a sample of que many health-promoting qualities these potent plants possess. Therefore, they should be viewed as part of both prevention as well as intervention

approaches.

Conclusion

Stress is any aversive stimulus that disrupts the physiological homeostasis and in response the biological system reacts to such stressors in a stressor type/duration/intensity dependent manner (Ray et al., 2016). Factors such as excessive stress can cause anxiety, tension, and depression and have an adverse effect on normal life (Choi, Kim, Hwang, Lee, Kim, Choi, et al., 2017). Threats to homeostasis can be considered an index of survival, and the brain is the key organ that mobilizes the body's defenses to mitigate such threats, and return the organism to homeostatic balance (Karatoreos et al., 2013). Therefore, an action over an individual, regardless of its physical or psychological origin, will produce as a response a deviation from homeostasis and a subsequent allostatic reaction in an attempt to reestablish balance (Carvalho, 2007). The literature indicates that allostatic load, via biological mediators, can contribute to the development of ill-health and disease including: cardiovascular, metabolic, immune, and autoimmune disorders, and is correlated with psychological disorders such as post traumatic stress disorder (PTSD), major depressive disorder, and anxiety (Commonwealth of Australia. Department of Veterans' Affairs, 2012). Nonetheless, the ability to cope with the stressor and maintain the homeostatic mechanisms are crucial determinants of health and disease (Ray et al., 2016). In this respect naturopathic interventions may prove highly effective.

Naturopathy is guided by a unique set of principles that recognize the body's innate healing capacity, emphasizing disease prevention, and encouraging individual responsibility to obtain optimal health (Fleming & Gutknecht, 2010). The principle of naturopathy *primum non nocere* or first do no harm, indicates that naturopathic practitioners place patient safety first (WHO, 2010). On the other hand, the principle *Vis Medicatrix Naturae* or the healing power of Nature (WHO, 2010; WNF, 2017a; WNFb) recognizes the body's natural healing ability, and trusts that the body has the innate wisdom and intelligence to heal itself if given the proper guidance

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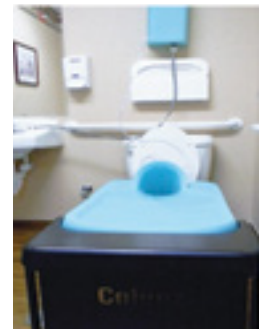
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and tools (Fleming et al., 2010), with the aid of natural non-toxic therapies (Murray & Pizzorno, 2012). At this point adaptogens become a coherent option to promote health and prevent disease in concordance with naturopathic practice. Moreover, in the initial conception of Naturopathy in the United States, Henry Lindlahr, M.D. (1914) advocated for the use of chemical remedies, such as scientific food selection and combination, homeopathic medicines, simple herb extracts, and the vito-chemical remedies. Therefore, adaptogens should be seriously considered in the integrative healthcare approach for physical and psychological conditions as well as allostatic load that affects individuals and potentially will lead to chronic illness if not managed properly. Adaptogens such as *Eleutherococcus senticosus*, *Curcuma longa* and *Withania somnifera* (among many other plants) under professional advice, are a feasible option and addition to promote health and improve individual's quality of life.

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AMERICAN NATUROPATHIC MEDICAL ASSOCIATION



Recap of the 2018 ANMA Convention By: Hayleigh Hayhurst

The 37th Annual American Naturopathic Medical Association Convention (held at the Westgate Resort and Casino in Las Vegas, NV on August 24, 25, and 26, 2018) featured educational seminars, lectures, workshops and honored those who earned the higher achievement award. All three days were filled with naturopathic leaders speaking about cutting edge topics that made this well attended event so successful. The ANMA convention attracts people from all over the world in various fields of study, such as Medical Doctors, students and those who are eager to learn, and brings them together to build strong, professional connections.



Topics at the conference included “Extreme Gladiator Health” by Author Roger Bezanis, “Lyme Disease Protocol Using Homeopathy & Functional Medicine” by Theresa Dale, Ph.D., CCN, N, “Predicting Cardiovascular Risk – Inflammatory Testing” by our Gold Sponsor, Thomas Hobbs, DC, MD, PHD, ND, DACBN, DABCI, BCIM, ABMPP and many more throughout the three day conference.



During the second day of the conference, ANMA celebrated those who inspire others in the field and strengthen the entire naturopathic profession by honoring them with an award. This members luncheon also featured Dr. Thomas Hobbs on a topic of interest, and Julie Coombs, the Director of ANMA, recapping what happened in the world of naturopathy, as well as looking forward to the year ahead. After the awards and presentations members enjoyed a buffet and gathered together to gain valuable and professional connections.



ANMA provided an exhibit hall featuring exhibitors with cutting edge technology, products, and workshops. This is a rejuvenating weekend spent with the like minded, educated, creative and interesting people that make up ANMA's membership.

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