

Advanced Detoxification Protocols

By Lyn Hanshew, M.D.



The pollution of our planet is intrinsically linked with the escalation of disease incidence and deterioration of our health. The silent killers of the 21st century are the toxic heavy metals and chemicals that accumulate in our bodies over our lifetime. Each year the U.S. alone releases a staggering 4 billion pounds of these toxins into our environment contaminating the air, water, soil, plants, animals, and, of course, humans.

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Patients ask, “How Can I Be Toxic?”

Common Sources of Mercury Revealed

By Garry F. Gordon M.D., D.O., M.D.(H)



“Doctor, where could I be getting Mercury or other toxic heavy metals from?” When you report the results of heavy metal testing on hair, blood or urine patients may have difficulty imagining where they might be exposed to toxic heavy metals such as Mercury. We now find that up to 10% of daily calories for some people come from High Fructose Corn Syrup, which has recently been proven to contribute mercury to our intake.

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Environmental Toxins and Women’s Health

By Lyn Hanshew, M.D.



The exponential increase of diseases and symptoms is directly related to the increase in environmental toxins. Over 100,000 toxic chemicals have been released into our environment since World War II ¹. A new study by the Environmental Working Group completed in May of 2009 ² found up to 48 toxic chemicals commonly used in everyday consumer products in blood and urine samples of five prominent women environmental activists who live across the U.S. “

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Correcting Hormone Imbalance with Detoxification

By Lyn Hanshew, M.D.

Environmental toxins such as heavy metals, pesticides, herbicides and volatile organic compounds are more pervasive than ever. From contaminated air and food, to pharmaceutical byproducts in water supplies, as our toxic exposure increases, so does our bio-accumulation of these same toxins.

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Advanced Detoxification Protocols

by Lyn Hanshew, M.D.

The pollution of our planet is intrinsically linked with the escalation of disease incidence and deterioration of our health. The silent killers of the 21st century are the toxic heavy metals and chemicals that accumulate in our bodies over our lifetime.

Each year the U.S. alone releases a staggering 4 billion pounds of these

toxins into our environment contaminating the air, water, soil, plants, animals, and, of course, humans. Mercury, lead, cadmium, arsenic, insecticides, dioxins, furans, phthalates, VOCs, and PCBs are just some of the foreign substances that have created an excessive toxic body burden of harmful chemicals. Most of us have between 400-800 potentially toxic, carcinogenic, endocrine-disrupting, and gene-damaging chemicals stored within our cells.

Is the Cancer Epidemic Related to Toxins?

According to the Columbia University School of Public Health, 95 percent of cancer is caused by poor diet and environmental toxicity. And it's not just cancer. The systems most affected by these toxic compounds include the immune, neurological, and endocrine systems. The deleterious effects of toxins upon these systems can lead to many chronic health problems including: immune dysfunction, autoimmunity, inflammation, asthma, allergies, cognitive deficits, mood changes, neurological illnesses, and changes in libido, reproductive dysfunction, hyperlipidemia and glucose dysregulation.

Of all the toxins, mercury is the most destructive to the neurological, immune and endocrine systems. It is a deadly mutagen causing DNA damage. Mercury contributes to or causes illnesses including autism, autoimmune diseases, Alzheimer's dis-

ease, cancers, heart disease, endocrine problems, and neurological and behavioral disorders.

it is used in the mouth as part of amalgam dental fillings or is used as a "preservative" in multi-dose vials of infant vaccines. Mercury typically makes up about 50% of a dental amalgam according to NEWMOA.²

³ The FDA in June of 2008 did finally

admit that mercury amalgam is neurotoxic however they still deny

the neurotoxic and immunotoxicity of the thimerosal contained within infant vaccines.

The problem with toxins such as mercury and lead is that once they enter the body, they are difficult to remove. Toxic accumulation quickly overwhelms the body's detoxification pathways and can ultimately result in severe symptoms or a chronic, debilitating illness. The alarming fact is that there are simply no safe levels of exposure to any of these toxic contaminants.

Toxic Heavy Metals and Infections

Researchers at the Heart Disease Foundation in New York found that antibiotics used to treat infection were not effective in the presence of heavy metals such as mercury and lead. These toxic heavy metals coexisted with infections caused by Chlamydia trachomatis and Herpes simplex, as well as with cytomegalovirus and other microorganisms, including viruses associated with cancer.⁴

Overwhelming evidence that toxic heavy metals cause the development of chronic

"For each equivalent of stored toxins there is an equal amount of pathogenic microorganisms in the body. Thus, the importance of both treating infection and detoxifying simultaneously as part of a well-planned health optimization strategy cannot be overstated." Dr. Dietrich Klinghardt, M.D., PhD



Results RNA® Clinical Research — Patient Samples

PATIENT 1 - Using ACZ nano® – Pre and Post-provocation study

MERCURY LEVELS BEING ELIMINATED	PRE-PROVOCATION	POST-PROVOCATION
		13.05 mcg/g
	0.24 mcg/g	

PATIENT 2 - Taking ACS 200® and ACZ nano®

	4/2/08	10/31/08
TOTAL CHOLESTEROL	259 mg/dl	197 mg/dl
HDL	52 mg/dl	39 mg/dl
LDL	181 mg/dl	131 mg/dl

Research studies are available at www.resultsrnaresearch.com

illness is now widely available in scientific literature.^{5,6,7} And yet the study of toxic metals and their relationship to chronic illness has been and is still largely overlooked in the training of mainstream health care practitioners. Effective, concomitant detoxification of pathogens and toxins can provide the answers and successful treatment to many illnesses plaguing people today.

Solving the Toxicity Puzzle

A respected pioneer in the field of heavy metal detoxification, Dr. Dietrich Klinghardt, M.D., PhD has determined that there is a direct correlation between stored toxins and infectious pathogens. He states that “for each equivalent of stored toxins there is an equal amount of pathogenic microorganisms in the body.” The presence of stored toxins causes immune system deficiency that supports the growth of pathogens such as bacteria, viruses, fungi, and parasites.

The term Toxic Body Burden (TBB) is now being used in reference to toxic heavy metals, synthetic chemicals, and pathogens that enter and accumulate in the

body. Retaining and restoring vibrant health requires an effective two-pronged approach that can detoxify toxic substances while simultaneously eliminating infectious microorganisms.

Zeolite - Removes Toxins Naturally

Natural zeolites are a class of crystalline, hydrated aluminosilicates of alkali and alkaline earth cations, having three-dimensional structures. Most common natural zeolites are formed by alteration of glass-rich volcanic rocks (tuff) with fresh water in playa lakes or by seawater.⁸ For thousands of years, civilizations throughout the world have used zeolites as a traditional medicine. Zeolites are now used extensively in various industrial applications based on their properties to act as catalysts, ion exchangers, adsorbents, and detergent builders. The specific species of zeolite that has the

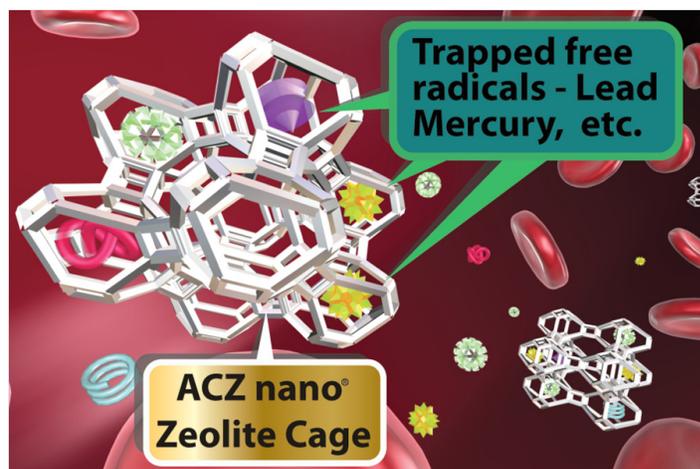
most important health benefits is Clinoptilolite. Clinoptilolite is so effective in binding toxins that it was given to victims of the Chernobyl explosion to ingest in order to bind the radioactive isotopes that were released and thus reduce radiation levels in their bodies.

What makes Clinoptilolite so unique is its negatively charged, cage-like, honey-combed structure. When ingested, this natural mineral attracts and irreversibly binds toxic heavy metals, chemical elements, and free radicals and is then excreted through the urinary tract. This process is called Chelation.

One of the most significant benefits of Clinoptilolite over other chelating agents is its affinity schedule for toxic heavy metals. Clinoptilolite binds with mercury first and lead second, moving on to additional positively-charged toxic heavy metals and chemical toxins which may include pesticides, herbicides, plastics, and even radioactive particles without removing precious nutrients such as calcium and magnesium.

However, Clinoptilolite goes far beyond the critical job of removing damaging toxins. Research has shown that it has many other vital actions in the body.

Clinoptilolite removes free radicals. Unlike classic antioxidants, Clinoptilolite does not neutralize free radicals by donating an electron to stabilize them. Instead,



its structure captures free radicals. Once trapped inside the cage, the inactivated free radical can then safely be eliminated from the body.

- Clinoptilolite has broad-spectrum antiviral properties: first, by attracting and binding viral sub-particles, thereby interfering with viral replication and eliminating them from the body and second, by inhibiting viral proliferation via immune modulation of T cells.

- Clinoptilolite helps maintain proper pH by removing acidic ions and chemicals which then promotes optimal metabolic and immune functions.

- Clinoptilolite may help to eliminate carcinogenic toxins from the body, especially a category of carcinogens called nitrosamines. The most common sources for these nitrates include processed meats, cigarettes, and beer which are linked to pancreatic, stomach, and colon cancers.

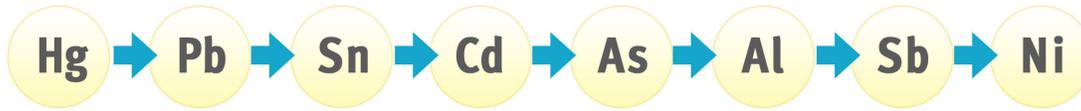
- Clinoptilolite treats diarrhea, promotes healthy digestion and encourages nutrient absorption. Clinoptilolite's ability to capture ammonium ions during digestion promotes a healthier and less toxic digestive system.

A Silver Lining against Pathogens

What did doctors prescribe before the advent of antibiotics to combat infections? The medical profession used colloidal silver. In 1914 the medical journal Lancet reported phenomenal results from silver use stating it to be absolutely harmless, non-toxic to humans, and highly germicidal. In 1929 over 5 million prescriptions for silver-based products were issued in the United States alone. In fact, colloidal silver has proven itself useful against all species of fungi, parasites, bacteria,

protozoa, and viruses.

For centuries dating back to Hippocrates, silver's healing properties for both external and internal use for a variety of medical conditions was widely known. Properly formulated colloidal silver is,



beyond a shadow of a doubt, one of the most powerful, yet totally safe, antibiotics known to man. With antibiotic resistant strains of bacteria increasing at an alarming rate, efficacious and advanced forms of colloidal silver are once again offering safe solutions with no risk of developing resistance.

21st Century Detoxification

To effectively reduce Toxic Body Burden of harmful toxins and infections, Results RNA® has created Total Body Detox® composed of two revolutionary Intra-oral spray formulas, Advanced Cellular Zeolite (ACZ) nano® and Advanced Cellular Silver (ACS) 200®. With very impressive research results, these two products

deserve specific mention.

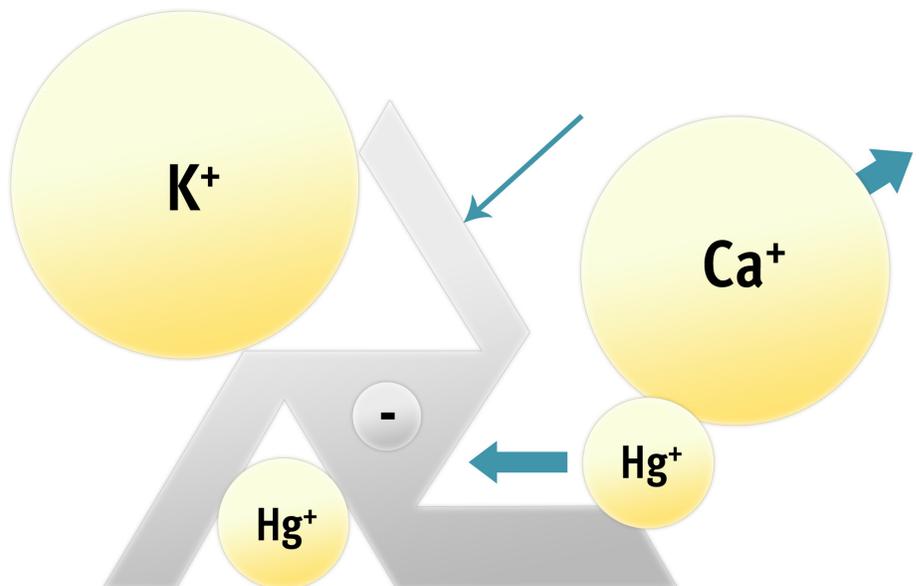
Advanced Cellular Zeolite (ACZ) nano®
ACZ nano® has many significant qualities which make it a superior choice over other detoxification or chelation methods, including other zeolite-based products.

In urine challenge studies, ACZ nano® has been independently proven

to increase urinary output of mercury, lead and other toxic metals by several thousand percent. It is interesting to note that extremely toxic mercury levels were recorded in the urine of patients while taking ACZ nano® who had undetectable mercury levels in their baseline urine. These significant research results show just how difficult it is for the body to remove mercury and other toxins without an effective chelator present. Urine challenge (pre and post-provocation) studies are the gold standard in measuring the efficacy of any chelating agent.

Traditional chelating agents have significant limitations in safely removing mercury, lead, cadmium and arsenic.

Cleaned Zeolite: Negatively Charged Cage Structure



One drawback is that agents such as Ethylenediaminetetraacetic (EDTA) have high affinity for essential nutrient minerals such as calcium and remove them simultaneously with toxins. If not carefully monitored, this removal of calcium can be quite dangerous and bring on rapid muscle weakness and potentially cause heart damage. Also, EDTA has very limited affinity for mercury.

A distinct advantage of submicronized clinoptilolite is its highly selective attraction for toxic heavy metals with no attraction for vital nutrient minerals like calcium, potassium, and selenium. Clinoptilolite's highest affinity is for mercury and lead.

The following affinity schedule of clinoptilolite zeolite for various

heavy metal ions is backed by atomic absorption spectroscopy studies. The affinity of clinoptilolite for toxic heavy metals is based upon their relative size, shape and density, and concentration gradient. Notice mercury is highest in preference of attraction.

ACZ nano® safely removes Mercury, Lead, Tin, Cadmium, Arsenic, Aluminum, Antimony, Nickel and all other toxic heavy metals as documented by urine pre and post-challenge tests.

Another issue with acid-based chelators such as EDTA, DMSA, and DMPS is the phenomenon known as “pull-and-drop.” With a weak bond, these chelating agents can pull out a toxin such as mercury from the tissues and then drop the mercury into the bloodstream where it can redeposit in the brain or other vital organs. If this happens the patient's condition is likely to worsen. With ACZ nano® toxins are tightly and irreversibly bound within the zeolite cage and safely eliminated through the

urinary tract from the body within hours.

The strength of the clinoptilolite bond is based upon:

- The toxin's charge density
- The toxin's average molecular size
- A phenomenon known as “molecular adaptive-fit”.

As you can see, mercury molecules fit tightly while potassium and calcium do not.

Another quality which makes ACZ nano® such an effective chelating agent is a proprietary nano-technology which provides a significantly greater number of nanomized clinoptilolite crystals per dose. This results in an exponentially greater

that has been proven capable of rapidly killing an enormous array of disease-causing organisms; literally oxidizing the cell wall of Gram-positive and Gram-negative bacteria as well as destroying viruses, fungi, parasites and spirochetes.

How safe is this product? An FDA protocol acute oral toxicity study was conducted by Pacific BioLabs in Hercules, CA. Using mega doses of ACS 200®, there were no toxic signs observed throughout the study. Results like this are unheard of when testing the LD50 of traditional antibiotics. Considering the power this formula provides in eliminating pathogens, the safety factor is truly remarkable.

How does this unique silver formulation work? Many forms of bacteria, viruses and fungi utilize a specific

enzyme for their metabolism. ACS 200® effectively disables the enzyme that is necessary for these organisms to stay alive and is lethal to all species tested of fungi, bacteria, protozoa and viruses. Unlike prescription antibiotics, ACS 200® does not harm the intestinal micro biota, also known as “normal flora”.

Covered by over ten patents to date, the unparalleled safety and efficacy of ACS 200® makes this silver-based antimicrobial the first choice of Health Care Professionals around the world.

Study Shows Yeast Binds Mercury

“The following study demonstrates the relationship existing between yeast and mercury, two of the most common pathogen and toxin pairings plaguing people today.

This study was performed by growing *Saccharomyces cerevisiae* in the presence of Mercuric chloride. Then, the physical and chemical characteristics of the yeast were

Independent studies show just how powerful ACS 200® is, achieving complete kill against Methicillin-resistant *Staphylococcus aureus* (MRSA), *Candida* and Rhinovirus in less than 3 minutes.

clinoptilolite surface area providing far more attraction and elimination of toxins than other chelation products.

Proven Research and Performance

The performance of ACZ nano® has been well-documented and is being used by thousands of practitioners worldwide as the preferred replacement for nutrient-robbing forms of chelation. Pre and post-provocation clinical studies can be viewed at www.resultsrna.com/research

Advanced Cellular Silver (ACS) 200®

There are a multitude of ‘silver’ products on the market today but how many are truly safe and truly effective? ACS 200® represents a major advancement in medical-use silver technology and excels in both categories, demonstrating a much broader pathogen kill spectrum than traditional prescription antibiotics, anti-fungal, or antiviral preparations. Far more advanced in both safety and efficacy than traditional colloidal silver, ACS 200® is a 200 PPM (parts per million) cellular silver

examined by fractionation procedures and autoradiography.

Experiment and Findings:

- Post 15 hour incubation, nearly all the mercury present was in the yeast cells, with almost none left in growth medium.
- The major fraction of mercury was bound into the yeast cell walls. Only a small proportion of mercury appeared to be in weakly bound, ion exchange positions.
- Yeast cell walls are capable of binding approximately their own weight of mercury.”⁹

Concomitant Detoxification - The New Maxim in Health

Over eons of evolution, pathogenic microorganisms have learned to inhabit toxic environments within the host in order to survive; and the more toxic (as with mercury toxicity) the better. It is within this extremely toxic environment that immune cells die, allowing pathogenic organisms the unmolested freedom to thrive and colonize. In yet another study, and far beyond the process of simply ‘binding’ mercury, *Candida albicans* was shown to convert organomercury to the much more toxic methylated mercury, shown to have greater affinity for fatty tissues, and to be far more difficult to remove from the body.^{10, 11, 12}

The case for the Total Body Detox®



protocol is based upon the devastating interrelationships between pathogens and toxins; the destructive sum is truly greater than the whole. The synergy that exists between these seemingly separate entities has profound health implications. It was not too long ago that supplementing nutrition was a new concept, a notion now as common as sunrise. Given the extreme environmental pollution of the current age, uptake and bio-accumulation of toxic elements is appalling. As studies show, chelation of pathogen-bound toxic heavy metals is nearly impossible without destroying the pathogens first. Concomitant detoxification is now imperative to achieve optimal health.

About the Author:

Dr. Hanshaw practiced medicine on the eastside of Seattle for 15 years. She is Board-Certified in Family Medicine and Bariatric Medicine. She also has specialized training in Anti-Aging Medicine, Natural Hormone Replacement and Environmental Toxicity issues relating to the exponential rise in the incidence and successful treatment of Autism, Fibromyalgia, ADD, Chronic Fatigue, Multiple Sclerosis, Obesity, Anxiety, Depression and Cancer.

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Patients ask, “How Can I Be Toxic?” Common Sources of Mercury Revealed

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“Doctor, where could I be getting Mercury or other toxic heavy metals from?” When you report the results of heavy metal testing on hair, blood or urine patients may have difficulty imagining where they might be exposed to toxic heavy metals such as Mercury. We now find that up to 10% of daily calories for some people come from High Fructose Corn Syrup, which has recently been proven to contribute mercury to our intake. Eating fish is another major contributor of dietary mercury from the following FDA report.

The FDA analyzes some foods for mercury through the ongoing surveillance program known as the Total Diet Study (TDS). The TDS, however, does not test all foods for mercury.

Mercury is routinely detected by the TDS in fish, liver, and poultry because farmers routinely use fishmeal and/or fish oil as feed for certain livestock to include chickens, swine, dairy cows,

and farmed fish. Animals that are fed fishmeal can bioconcentrate monomethyl mercury in protein matrices...

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Mercury from chlor-alkali plants: measured concentrations in food product sugar

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Abstract

Mercury cell chlor-alkali products are used to produce thousands of other products including food ingredients such as citric acid, sodium benzoate, and high fructose corn syrup. High fructose corn syrup is used in food products to enhance shelf life.

A pilot study was conducted to determine if high fructose corn syrup contains mercury, a toxic metal historically used as an anti-microbial. High fructose corn syrup samples were collected from three different manufacturers and analyzed for total mercury. The samples were found to contain

levels of mercury ranging from below a detection limit of 0.005 to 0.570 micrograms mercury per gram of high fructose corn syrup.

Average daily consumption of high fructose corn syrup is about 50 grams per person in the United States.

With respect to total mercury exposure, it may be necessary to account for this source of mercury in the diet of children and sensitive populations. ■

Environmental Toxins and Women's Health

by Lyn Hanshew, M.D.



The exponential increase of diseases and symptoms is directly related to the increase in environmental toxins. Over 100,000 toxic chemicals have been released into our environment

since World War II ¹. A new study by the Environmental Working Group completed in May of 2009 ² found up to 48 toxic chemicals commonly used in everyday consumer products in blood and urine samples of five prominent women environmental activists who live across the U.S. "In everyone we found fire retardants, Teflon chemicals, fragrances, bisphenol A or BPA, and perchlorate" stated Sonya Lunder, MPH. These chemicals have been linked to birth defects, hormonal dysregulation and increased cancer rates. Anila Jacob, MD, MPH notes that health trends in the U.S. suggest that the chemical load plays a role, citing growing rates of autism spectrum disorder, diabetes, and certain cancers. "These chemicals are showing up in people. They can be potent at very low levels of exposure; we know that from animal studies." While the rising number of chronic diseases has many roots, she says, the increased exposure to chemicals is one factor.

"We are walking, talking toxic waste sites," Nancy Evans from the Breast Cancer Fund stated in 2001 ¹. Her comments were regarding the CDC report published in 2001 documented the widespread pesticide contamination, high levels of

Mercury and phthalates across the U.S.

"I feel stupid, fat and tired" is a common lament of American women. Obesity rates have skyrocketed in the past 20 years with the CDC reporting in June 2009, with 1/6th of Americans overweight and an estimated 39.8 million people affected. Fifty percent of women in the U.S. age 20 to 74 are overweight or obese (The National Women's Health Information Center). The incidence of Chronic Fatigue Syndrome is 1/544 Americans and an estimated 500,000 are affected ¹². Thorough evaluation of these people will invariably reveal heavy metal toxicity and correlated neurological, immune and endocrine dysfunction. The disruption these toxic chemicals cause in the metabolic pathways of the neurological, immune and endocrine are well-described and include:

a) Interference with the GTP energy molecule in neurons preventing the proper structure and function of neurons and resulting in neurofibrillary tangles, pathognomonic for Alzheimer's disease and decreased neurotransmitter production ³. Symptoms would include Anxiety, Depression, Bipolar Affective Disorder, and Sleep and Mood disturbance, Addiction, MS, Dementia and Parkinson's.

b) Interference with thyroid hormone metabolism: Mercury, Lead, Cadmium, and Arsenic block conversion of Free T4 (which is inactive in the body) to the active Free T3. Free T3 is responsible for balanced mood, energy, metabolism, regulation of Glucose and Cholesterol levels, temperature regulation of the body (cold hands

and cold feet), central obesity and gut motility required for proper elimination ^{9,10}.

c) Interference with production of ATP energy molecule in mitochondrion of cells: Mercury specifically competes with Magnesium to block the release of chemical energy from the ATP bonds resulting in fatigue, weight gain and low metabolic activity.

d) Toxins negatively affect cell-mediated immunity and antibody production resulting in infection and tumor development.

e) Toxins affect the metabolic pathway of equilibrium of Omega 3 fatty acids and Omega 6 fatty acids resulting in an increase of histamine and leukotrienes. This is the basis of inflammation, allergy and auto-immune reactions.

f) Specific to women is the increased rate of miscarriage. This is reflective of the truism that pregnancy is the number one detoxification protocol for women. The toxins pass from the mother through the placenta to the fetus. The average newborn in the U.S. has over 206 toxic chemicals. Toxins from the mother pass through the breast milk to the newborn, as well ^{11, 14, 15, 16}.

The good news is that the diseases and symptoms stemming from environmental toxins are relatively simple to identify and correct. If the problem is toxicity, then by definition the solution is detoxification. Sub-micronized clinoptilolite zeolite irreversibly binds toxic heavy metals and other toxins and is excreted through the

urinary tract without any side-effects. Acid-based chelators such as EDTA, DMSA and DMPS have the significant disadvantage of binding the nutrient metals such as Calcium and Magnesium resulting in depletion and potential side-effects. In my research and clinical use, ACZ nano® has proven the most effective chelating agent available to remove toxic heavy metals, chemical toxins and free radicals. Urine provocation studies using this nanomized clinoptilolite zeolite are also an effective way to accurately test and detect the presence of toxic heavy metals. Examples of urine provocation studies can be found at www.resultsrna.com.

Another key aspect of detoxification is addressing the pathogen load associated with a compromised immune system. ACS 200® by Results RNA® is the only antimicrobial I am aware of, shown to be effective in killing all pathogens tested, including Candida. Candida and other fungi store Mercury in their cell walls. In order to decrease the body burden of Mercury, it is critical to kill the Candida, and to bind and excrete the released Mercury using ACZ nano®.

As the toxins and pathogens are eliminated from the body, the cells, tissues and organs can begin to heal and function. The key to facilitating the healing process is in supporting the endocrine system. Proper laboratory testing must be done. This includes checking Free T3 and Free T4 levels as well as assessing the Adrenal function by checking DHEA-SO₄, Total Testosterone, Estradiol and Progesterone levels. It is important to understand that the references ranges on the lab report refer to an ill population and do not reflect the optimal ranges necessary for optimal health and function. Bio-identical hormone supplementation is usually required to support the endocrine system as it heals and begins to regain its critical role.

Let's examine pathogenesis. If a person understands that toxins are truly the

etiology of most modern diseases and symptoms, it is then possible to trace the biochemical pathway of cause and symptoms. Fibromyalgia was first described in the Psychiatric literature as a mental disorder only in women. It is now defined as a fatigue and pain syndrome of unknown cause occurring in both sexes with no known cure. In this example, the symptom of pain is often caused by toxins interfering with biochemical pathways involving Omega 3 and 6 fatty acids conversion resulting in increase histamine and leukotriene production causing inflammation and pain. Toxins also generate free radicals and an acidic environment which is damaging to tissues resulting in pain. The fatigue aspect of Fibromyalgia can be caused by interference of toxins with the production of ATP necessary for cellular function and interference with the conversion of Free T4 to Free T3. It has been my experience that when the body is detoxified using ACZ nano® and pathogen load is reduced using ACS 200® and the hormones are optimally balanced that "diseases" and symptoms resolve.

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Correcting Hormone Imbalance with Detoxification

by Lyn Hanshew, M.D.



Environmental toxins such as heavy metals, pesticides, herbicides and volatile organic compounds are more pervasive than ever. From contaminated air and food, to pharmaceutical

byproducts in water supplies, as our toxic exposure increases, so does our bio-accumulation of these same toxins. The body has limited ability to metabolize, mobilize and excrete these poisons. Stored toxins negatively impact the neurological, immune and endocrine systems and as significant damage is done, we develop symptoms and disease related to these impaired systems.

Toxic exposure begins in the earliest stages of life as the fetus is contaminated

by poisons passing through the placenta. The average newborn in the U.S. has over 206 toxic chemicals present in her tiny body the day of birth. The toxic onslaught continues as poisons are passed from the mother to the newborn via the breast milk. The typical baby and her family are surrounded by poisoned air, food and water. Another major source of contamination is the infant vaccines that still contain Thimerosal, a neurologically-devastating derivative of Mercury used as a preservative in multi-dose vials of vaccines. More and more evidence suggests that Thimerosal is a major factor contributing to the current autism rate of 1/150 children. This autism rate occurs only in the U.S., where the typical 2 y/o toddler has been inoculated with over thirty-five different vaccines, sometimes with as many as eight administered on the same day. The other common source of Mercury is dental

Mercury amalgam. It is estimated that 90% of Americans have Mercury amalgam in their mouths. This carcinogenic, toxic heavy metal off-gasses continuously from the amalgam in the mouth and travels directly via nerve pathways to the brain and throughout the entire body.

Let's examine symptoms related to a toxically impaired endocrine system. Hormones are messenger molecules that interact with receptors on the cell membranes to instruct the cell as to what to do. Common symptoms/diseases of deficient endocrine function include: Obesity, Diabetes, Hypercholesterolemia, Hyper or Hypo glandular function, Infertility, Fatigue, Chronic Fatigue, Fibromyalgia, Sexual dysfunction, Decreased libido, Impaired memory, Mood disorder, Sleep disturbance, Decreased cognitive function, Decreased cardiac function, Decrease

“Healthy” 34 y/o Male

**CC: Fatigue, decrease memory and focus
20lb weight gain**

		Optimal Ranges	
		Female	Male
Free T4	1.62	0.8 - 1.6 ng/dL	0.8 - 1.6 ng/dL
Free T3	2.35	4.0 - 4.5 pg/mL	4.0 - 4.5 pg/mL
DHEA-SO4	125	> 350.0 mcg/dL	> 450.0 mcg/dL
Estradiol	26	30.0 - 35.0 pg/mL	< 35.0 pg/mL
Progesterone	<0.3	0.8 - 1.4 ng/mL	0.8 - 1.4 ng/mL
Total Testosterone	231	30.0 - 35.0 ng/dL	> 500 ng/dL

The key points of these results are the optimal level of Free T4 with low conversion to Free T3.

Level of DHEA-SO4 is low and there is a toxic shift of DHEA sulfate metabolism to Estradiol, and away from Testosterone and Progesterone.

“Healthy” 53y/o Female

CC: 20lb weight gain, irregular periods, fatigue

Cold hands and feet, decreased memory

		Optimal Ranges	
		Female	Male
Free T4	0.8	0.8 - 1.6 ng/dL	0.8 - 1.6 ng/dL
Free T3	1.62	4.0 – 4.5 pg/mL	4.0 - 4.5 pg/mL
DHEA-SO4	177	> 350.0 mcg/dL	> 450.0 mcg/dL
Estradiol	25	30.0 - 35.0 pg/mL	< 35.0 pg/mL
Progesterone	0.33	0.8 - 1.4 ng/mL	0.8 - 1.4 ng/mL
Total Testosterone	43	30.0 – 35.0 ng/dL	> 500 ng/dL

The key points of these results are the optimal level of Free T4 with very low conversion to Free T3. A low DHEA-SO4 level is present with a toxic shift of DHEA-SO4 metabolism to Testosterone away from Estradiol and Progesterone.

muscle mass, Decreased bone mass, Osteopenia, Constipation, Cold hands/cold feet, and more. In conventional allopathic medicine, a patient is told that the “symptom” she is experiencing (such as one listed previously) is the “problem”, and “Oh, have I got a pharmaceutical drug for you!” Pharmaceutical drugs do not correct the problem of poisoned endocrine pathways.

Let’s examine some poisoned endocrine pathways and how these cause symptoms/diseases. Mercury and other toxic heavy metals are major offenders as mentioned previously. Mercury specifically competes with Magnesium and interferes with all Magnesium-dependent metabolic pathways such as production of energy from ATP and GTP which directly leads to lack of chemical energy. Every cell in the body requires chemical energy derived from ATP or GTP to function, heal and regenerate. If Mercury is present, this cannot occur and results in a long list of symptoms. Specifically related to hormone production and regulation, Mercury and other toxins prevent the conversion of Free T4 (inactive) to Free T3 (active). The enzyme required for this conversion is the 5'-deiodinase enzyme. This enzyme is inactivated

by Mercury, Arsenic, Cadmium and Lead. The conventional allopathic approach to thyroid assessment and treatment is based upon incorrect assumptions. The Thyroid Stimulating Hormone (TSH) test has become the allopathic Gold Standard Test for conventional thyroid function assessment. TSH is produced by the Pituitary gland in a negative feedback pathway in relationship to the Free T4 (inactive) level. The fallacy is that TSH production has nothing to do with the activity and production of Free T3 which is the active thyroid hormone. This is called Central Dysregulation, of which every poisoned person in America is a victim.

Every cell in the body requires Free T3 to function and regenerate. What are the symptoms of low Free T3? Obesity, Decreased muscle mass, Hypercholesterolemia, Hyperlipidemia, Decreased memory, Decreased cognitive function, Depression, Anxiety, Sleep disturbance, Constipation, Low Basal Body Temperature, Cold hands/cold feet, Dry skin, Hair loss, Brittle nails, Decreased cardiac function, and Slowed electrical conduction in nerves to list a few. These symptoms quickly resolve with bio-identical supplementation of Free T3 to optimal levels. Free T3 has a short half-life and should

be taken twice a day, morning and 8-10 hours later. Lab levels can be rechecked every 4 weeks and blood should be drawn 2 hours after morning dose for a peak level. Optimal range for Free T3 is 4.0-4.5 according to the American Academy of Anti-Aging Medicine.

Incidentally, the Reference Ranges on lab reports are meaningless to the individual. Any practitioner can tell you the number of times these “ranges” have been updated or revised. The Reference Range is determined by the most recent series of samples (with 2 standard deviations) from a “dead and dying” patient population. These ranges are not Optimal Ranges based upon samples from an optimally healthy and functioning patient population. The American Academy of Anti-Aging Medicine has provided Optimal Ranges for various hormone tests at their seminars. The goal however, is for you to produce your own Free T3 and this is accomplished by effective detoxification using Results RNA® ACZ nano® to quickly, safely and inexpensively remove the Mercury and other toxins from the body.

Another critical endocrine aspect is adrenal function. Toxins interfere with proper metabolic pathways involving Dehydroe-

piandrosterone (DHEA) and DHEA sulfate (the stable ester form).

Dehydroepiandrosterone (DHEA) is a major steroidal hormone and precursor that has a broad range of biological effects in humans and other mammals. Together with its sulfate ester (DHEA-S), it is the most abundant steroid in humans. DHEA is produced by adrenal glands, fat cells and also synthesized in the brain. DHEA can be metabolized into other sex hormones, including Testosterone and Estrogens, and up to 150 individual metabolites. Studies have shown that after about age 35, DHEA-SO₄ levels begin to decline. DHEA levels are now starting to fall at an earlier age and more rapidly due to the effects of toxins.

The following labs are typical results that I've seen in thousands of supposed "healthy" people who were evaluated for symptoms such as "feeling stupid, fat and tired." These people had gone to practitioners who ran the conventional standard tests and told they were "fine". When these patients' hormone levels were brought to optimal levels and toxicity was reduced, their symptoms resolved.

It only makes sense that in order for our cells to function, heal and regenerate, we must reduce our toxic body burden by removing the toxins using ACZ nano®; to kill the pathogens taking advantage of our compromised immune systems by using ACS 200®, and to optimize our hormones levels.

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- ^{36.} According to the EPA, Fine-particle pollution causes an estimated 20,000 premature deaths in the United States each year. Further, emissions of nitrogen oxide and sulfur dioxide from pots form smog and soot and are linked to thousands of premature deaths and illnesses every year.
- ^{37.} European Commission, some 9,000 deaths in the UK are caused or hastened by air pollution.
- ^{38.} Women who live in areas with greater air pollution have a higher susceptibility of developing and dying from coronary heart disease (CHD), according to a multi-decade study accepted today for publication in the peer-reviewed journal *Environmental Health Perspectives (EHP)*.
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