

# 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 <sup>1</sup>. A new study by the Environmental Working Group completed in May of 2009 <sup>2</sup> 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 <sup>1</sup>. 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 <sup>12</sup>. 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 <sup>3</sup>. 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 <sup>9,10</sup>.

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 <sup>11, 14, 15, 16</sup>.

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](http://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-SO<sub>4</sub>, 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.

### References

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