

Chemicals in the Environment and Human Sensitivity to Them

Undoing the Damage Caused by Chemical Exposures

Clearly we are in an ever-escalating battle for our health with many of the over 70,000 chemicals commercially produced in the United States. And most of these chemicals were invented only since World War II. If you are sensitive to chemicals, you are probably experiencing more than one of these symptoms: Chronic fatigue, wheezing, headaches, heart palpitations, cold hands and feet, stimulated appetite leading to over-eating, abdominal bloating, food intolerances...the list goes on and on.

We have learned from research and observation that the hallmark of sensitivity to chemical exposures (adverse reactions to ambient levels of chemicals) is the involvement of several organ systems at the very same time. These combinations of symptoms may stump, or may be overlooked by most medical practitioners unfamiliar with sensitivity to chemicals.

How We Get Affected

Chemicals and other substances enter our bodies through the air we breathe, the food we eat, and the water we drink. They can also be absorbed through our skin from the personal care products and

other solutions we use. Outside of living in a bubble, we can scarcely avoid this invasion of our bodies. What's worse, once they enter, chemicals accumulate and can stay for years unless they are removed by treatment.

Where Chemicals Are Stored

After chemicals enter our bodies, they circulate through the bloodstream to all parts of our bodies...even our brains. In fact, many if not most of these chemicals are fat soluble and get stored in the body's fat. Thin people are no exception as we all have some internal fat. After chemicals enter your body, they will find that fat which then will serve as a reservoir for dangerous toxins and become a staging ground for toxic illness. Only proper diagnosis followed by individualized treatments to remove those substances will reduce your chemical load.

Understanding How Sensitivity to Chemicals Occurs

To understand how sensitivity to chemicals develops, you have to understand two important phenomena, *Spreading* and *Switching*.

When an adult or child develops new reactions or symptoms to the same chemicals they already have a reaction to, it's called *Spreading*. This phenomenon affects people so that they become *additionally* sensitive to other environmental factors like foods, molds, grasses, trees, weeds, and dust. Where once there was a single symptom, for example, a head-

ache after smelling fresh paint, the symptoms will multiply to possibly include muscle aches, swollen, itchy eyelids, and difficulty concentrating...to name a few. Where they were never sensitive to pollens, they now will experience sneezing, a runny nose, or even depression. These new multiple sensitivities often come from chronic, "low-dose" exposure to one or more common chemicals. The term, "low-dose" is very misleading. While "low-dose" suggests there is no danger of toxicity, the truth is that many chemicals like the weed-killing herbicide 2, 4, 5-T (all-too-commonly used on lawns and golf courses) is harmful in minuscule parts-per-trillion.

Switching is when, upon chemical exposure, a person no longer experiences one symptom but develops other symptoms instead.

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Spreading and switching can happen together causing severe problems. Symptoms encountered may baffle many medical professionals not familiar with the diagnosis and treatment of sensitivity to chemicals.

Clearing Chemicals From the Body

Chemicals already in the body are not likely to leave on their own. So if you can, avoid them. But if you can't or didn't, you have to remove them. To remove them, we've got to assist the one organ in our body that is the command center for clearing and fighting our war against toxic chemicals: The liver.

The liver is responsible for neutralizing, metabolizing, and excreting toxic chemical compounds. Unfortunately for us, the liver can become overwhelmed by chemical exposures, even those thought to be "low-dose." That's where an Environmental Medicine Specialist plays a key role. We have developed treatments to maximize the liver's efficiency in clearing chemicals and reducing the body's fat stores of chemicals. The treatments enhance the manner in which chemical detoxification through the liver is accomplished.

Phase I liver detoxification results in the modification of reactive chemicals by oxidation,

reduction, hydroxylation, sulfoxidation, deamination, dealkylation, or methylation. Such modifications usually involve mixed function oxidases, cytochromes b3 and P-450, and the glutathione S-acyltransferases. Big words, but let it go as the first internal "scrub down." Here we may begin treatment by adding specific enzyme co-factors to help accelerate toxin removal.

Phase II liver detoxification may follow Phase I reactions or may proceed independently. Here, the liver *maximally* converts fat-soluble substances to water-soluble substances, facilitating their excretion from the body. Look at Phase II as the "flush."

Chemicals already stored in the fat are expunged by a unique detoxification program. To accelerate the detoxification during this phase, a combination of selected nutrients and amino acids are given to the patient along with an in-center heat detoxification program. This program contributes to the reduction of the total body chemical burden, and the eventual reduction or disappearance of symptoms.

For further information, please contact Manhattan Health Consultants or your primary care physician or specialist.

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Their Impact on Health, and Procedures for Clearing the Body.

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