## IMMUNO-NEURO-ENDOCRINE STRESS as it relates to infections/chemical toxicity/heavy metal toxicity

<u>Infections</u> are nothing but a contest between the virulence of the pathogen and the resistance of the host. When the resistance of the host is inadequate to conquer anything but the least virulent pathogens it is because that host suffers one or more Metabolic Imbalances. NUTRI-SPEC is the only system of metabolic therapy that specifically addresses <u>increasing the resistance</u> of the host by empowering <u>ImmunoNeuroEndocrine Adaptative Capacity</u>. The key is in restoring metabolic balance and efficiency.

Specifically, to fight off infection a patient must be able to generate an adequate Diphasic immune response. There is an Anaerobic/Anabolic phase of the immune response and a Catabolic/Dysaerobic phase. When individuals cannot beat an infection it is usually because they are stuck in one phase or the other and cannot mount a successful defense in the other phase. NUTRI-SPEC gives you the tools to push a patient through a powerful cycle that includes both phases of the immune response.

Without question, any infection a patient currently harbors can be an urgent priority. If the infection is bacterial, the patient may (or may not) benefit from an antibiotic (along with a synbiotic, of course). If the microbial pathogen is fungal there are several options for treatment available, depending on the location and severity of the infection. It is not that infections need to be cleared out before NUTRI-SPEC, but they should be addressed immediately and concurrently with NUTRI-SPEC. Those infections only exist because of NUTRI-SPEC Imbalances. --- There is no point clearing out the infection that is there without strengthening the ImmunoNeuroEndocrine systems whose failure allowed the infections to begin with.

<u>Chemical toxicity</u> is similar to infection in that it is a contest between the toxicity of the chemical and the <u>ImmunoNeuroEndocrine</u> strength or the detoxification capacity of the patient. Again, when a person is suffering the toxic effects of anything but the most extraordinary chemical exposure it is usually because the liver and reticuloendothelial system are less than efficient because of some fundamental Metabolic Imbalance – which NUTRI-SPEC can correct. All the nutrients known to specifically aid liver detoxification such as taurine, glutamine and lipoic acid are included in the various NUTRI-SPEC protocols. The means to balance and coordinate Immunoglobulins, Th1 and Th2 cytokines, and corticoid and catecholamine defenses against toxic exposure are also built in.

"Natural" "detoxification" schemes (scams) as an adjunct to NUTRI-SPEC? -----Largely great examples of nature-cure mythology. ----- There is no such thing as an accumulation of toxins independent of the NUTRI-SPEC Metabolic Balance and Vital Reserves paradigm.

There are four sources of toxins. One is end products of <u>normal metabolic processes</u> that are occurring in <u>excess</u> (such as for example, the excess ammonia produced by Anaerobic patients. --- Producing ammonia is a perfectly normal part of physiology, but Anaerobic patients do it to excess). The second source of toxins is metabolic toxins produced as a result of <u>inefficient metabolic pathways</u> that are diverted down accessory pathways, and again, these are the result of Fundamental Metabolic Imbalances, or the absence of Vital Reserves to maintain the normal flowchart of that particular metabolic pathway.

The third source of toxins is endotoxin absorbed from the gut --- the results of abnormal intestinal microbiota. But the unhealthy microbiota can only exist when the individual is feeding the nasty critters the garbage they love, and when the ImmunoNeuroEndocrine system that lines the gut is dysfunctional.

The fourth source of toxins includes those ingested, absorbed through the skin, or inhaled, such as insecticides, herbicides, drug residues in food and water, and other industrial waste. The most ubiquitous of all environmental toxins are the various mold and yeast toxins lurking in homes, schools, and workplaces --- unexpected and far more devastating than people realize. The critical first step in facilitating INE victory over environmental toxins is minimizing exposure --- each individual making clean air and water a priority.

What about the toxins that have entered the body faster than the hepatic, reticuloendothelial, and renal systems can conjugate and eliminate? The metabolic efficiency derived from Metabolic Balance & Vital Reserves is the answer. "Liver cleanses," "bowel cleanses," "blood cleanses" --- the endless list of herbal drugs and bizarre procedures purported to detoxify the body --- are nothing but naturopathic nonsense. Specifically supporting eliminative capacity is achieved by NUTRI-SPEC protocols.

**Heavy metal toxicity** is a totally different story. No matter what anyone tells you, there is no way to nutritionally address the issue of heavy metal elimination. The only way to chelate and eliminate heavy metals is pharmacologically. (DMSA is particularly effective, and less toxic than other options.) The health food industry propaganda about detoxifying heavy metals is pure quackery. For example, it is popularly promoted that the amino acid cysteine is an effective chelator of heavy metals. While that is very true --- cysteine will chelate (in other words combine with) heavy metals --- the kidneys have absolutely no means of eliminating the cysteine heavy metal chelate. Instead, the lead, or mercury, or aluminum (that the cysteine most likely pulled out of bone or other connective tissue, where most heavy metals are dumped, and where their effects are mostly benign) circulates in the blood stream where

it potentially contacts brain, nerve, or other vital tissues. There, it can do severe damage. It can also contact the INE system, triggering a potentially devastating reaction.

## **SUMMARY**:

ADAPTATIVE CAPACITY = METABOLIC BALANCE + VITAL RESERVES

INE Defense & Elimination Capacity = NUTRI-SPEC