

Metal Toxicity and DETOXIFICATION

- ◆ Human body is exposed to environmental toxins everyday from wide array of sources such as *particulate matter*, *diesel fumes* in the air, *heavy metals* in water, *pesticides* and *herbicides*, bisphenol A (BPA) in containers
- ◆ According to the Agency for Toxic Substances and Disease Registry (ATSDR) of the US Department of Health and Human Services, mercury is the 3rd most frequently found and the most toxic substances in the United States.
- ◆ Mercury is considered the most common cause of acute heavy metal poisoning.
- ◆ FDA has recommended that pregnant women, nursing mothers, and young children avoid eating fish with high mercury content, such as shark, swordfish, tilefish, king mackerel and whale meat.

Quicksilver Blood Metals Panel

- ⌘ screens a broad range of nutrient and toxic metals to show elevated exposures to toxic metals or imbalances of nutrient metals in whole blood

8 Nutrient Elements:

Calcium, Copper, Magnesium, Manganese, Molybdenum, Selenium, Zinc, Lithium

14 Potentially Toxic Elements:

Aluminum, Antimony, Arsenic, Barium, Cadmium, Chromium, Cobalt, Lead, Mercury, Nickel, Silver, Strontium, Titanium, Uranium

Quicksilver Mercury Tri-Test

- ⌘ uses **blood** to measure both *organic* and *inorganic* mercury in the body
- ⌘ uses **hair** and **urine** mercury levels to measure how well it is excreted by the body

Organic Mercury

- ~ from *fish* in your diet, or certain *vaccines* containing thimerosal;
- ~ excretion measured in hair

Inorganic Mercury

- ~ from *dental amalgam*, or *cosmetics*;
- ~ excretion measured in urine

Symptoms of Mercury toxicity:

- ▶ Subtle decrease in learning abilities
- ▶ Delayed in walking or talking
- ▶ Decrease in attention memory
- ▶ Numbness in hands and feet
- ▶ Headaches
- ▶ Fatigue
- ▶ Loss of concentration, coordination or memory
- ▶ Blurred vision
- ▶ Hair loss
- ▶ Nausea
- ▶ Tremors

Disorders Associated with Mercury Toxicity:

- * Autoimmunity
- * Autism
- * Alzheimer's Disease
- * Cardiovascular Disease

Factors that Impede detoxification:

- ➔ Age
- ➔ Organ Damage (Kidneys or Intestines)
- ➔ Endotoxin
- ➔ Cholestasis
- ➔ Toxistasis

What is **Detoxification**?

- process by which the body eliminates toxic substances
- by cleaning up the diet, eliminating sources of toxicity, *use of chelating substances*, antioxidant support, and therapeutic sweating
- use of “Push-Catch” strategy to maximize liver detoxification pathways

What is the **Detoxification Process**?

1. Healthy diet
 - Avoid sugar, milk, processed foods, most grains (especially wheat)
 - Follow a high protein diet
 - Drink adequate amounts of filtered water
2. Beneficial bacteria
 - It is optimal to have good intestinal flora for detox
3. Metal chelation
 - Chelating agents are administered to bind to the heavy metal in order for them to be cleared from the body.
4. Nutrition Support during chelation
 - Good multivitamin
 - Antioxidants: Vit. C, lipoic acid, Vit. E and CoEnzyme Q10
 - Amino acids: N-acetyl-cysteine, glycine, glutamine

Quicksilver Scientific’s Therapeutic Detox System

- food and supplement system to restore the body’s natural detoxification system and re-establish natural health and optimum functioning
- a pulsed dosing of a number of supplements and enzymes that support the detoxification process

References:

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