Revised Mercury Toxicity Model

Oxidative Stress w/ OP or Metals - Pb, Hg, Cd

Reduced Neuronal Plasticity and Impaired Learning

PON1 Decreases and Pb Levels may Increase with Ca Loss

Oxidative Stress w/ Metals – Pb, Hg, Cd

Metallothionein (MT) Disruption with Zn Loss and Cu gain

Low Mg + HFCS ->Mineral Imbalances (Zn, Ca, P loss and Cu gain)

MT and GSH Expression

Normal Toxic Metal (Hg) Elimination

Hg in HFCS, Food Colors, Amalgam, Vaccines

Mercury (Hg) in Environment

Glutathione (GSH)System Disruption with Deficit in Selenium Availability (Hg>Se) and PON1 Inhibition

Hg in Fish (Hg>Se)

Hg in Fish (Se> Hg)

Omega-3 Fatty Acids

Improved Neuronal Functioning & Plasticity