Casual Friday Series

Navigating Silent Health Hazards

Disclaimer

- *Information in this presentation is not intended, in itself, to diagnose, treat, reverse, cure, or prevent any disease. While this presentation is based on medical literature, findings, and text, The following statements have not been evaluated by the FDA.*
- *The information provided in this presentation is for your consideration only as a practicing health care provider. Ultimately you are responsible for exercising professional judgment in the care of your own patients.*

Toxins: A Common Silent Threat

Definition of Toxin:

- Substance from various sources (plant, animal, or synthetic).
- Triggers increased production of free radicals, leading to oxidative stress.
- Oxidative stress causes damage to cells, proteins, and DNA, potentially leading to organ failure, cancers, and other health issues.

Sources of Exposure:

- Daily exposure from various sources like household products, personal hygiene items, cookware, furniture, air, water, and food.
- Toxins enter the body through skin contact, inhalation, or ingestion.
- Once in the body, toxins circulate through the bloodstream, making homes in nerve and fat cells.

Ways Toxins Affect Health

1. Enzyme Dysfunction:

- Enzymes, crucial for chemical reactions, are damaged by toxins.
- Impacts digestion, hormone production, energy generation, wound healing, and temperature regulation.

2. Mineral Displacement in Bones:

- Toxins can replace calcium in bones, resulting in weakness and brittleness.

3. Organ Damage:

- Toxins affect various organs, leading to malfunction and symptomatic manifestations.

4. DNA Damage:

- DNA damage disrupts protein synthesis, potentially causing severe complications like cancer.

Ways Toxins Affect Health

5. Gene Expression Modification:

- Toxins can activate harmful genes, contributing to conditions such as autoimmune diseases, diabetes, and mental health disorders.

6. Cell Membrane Damage:

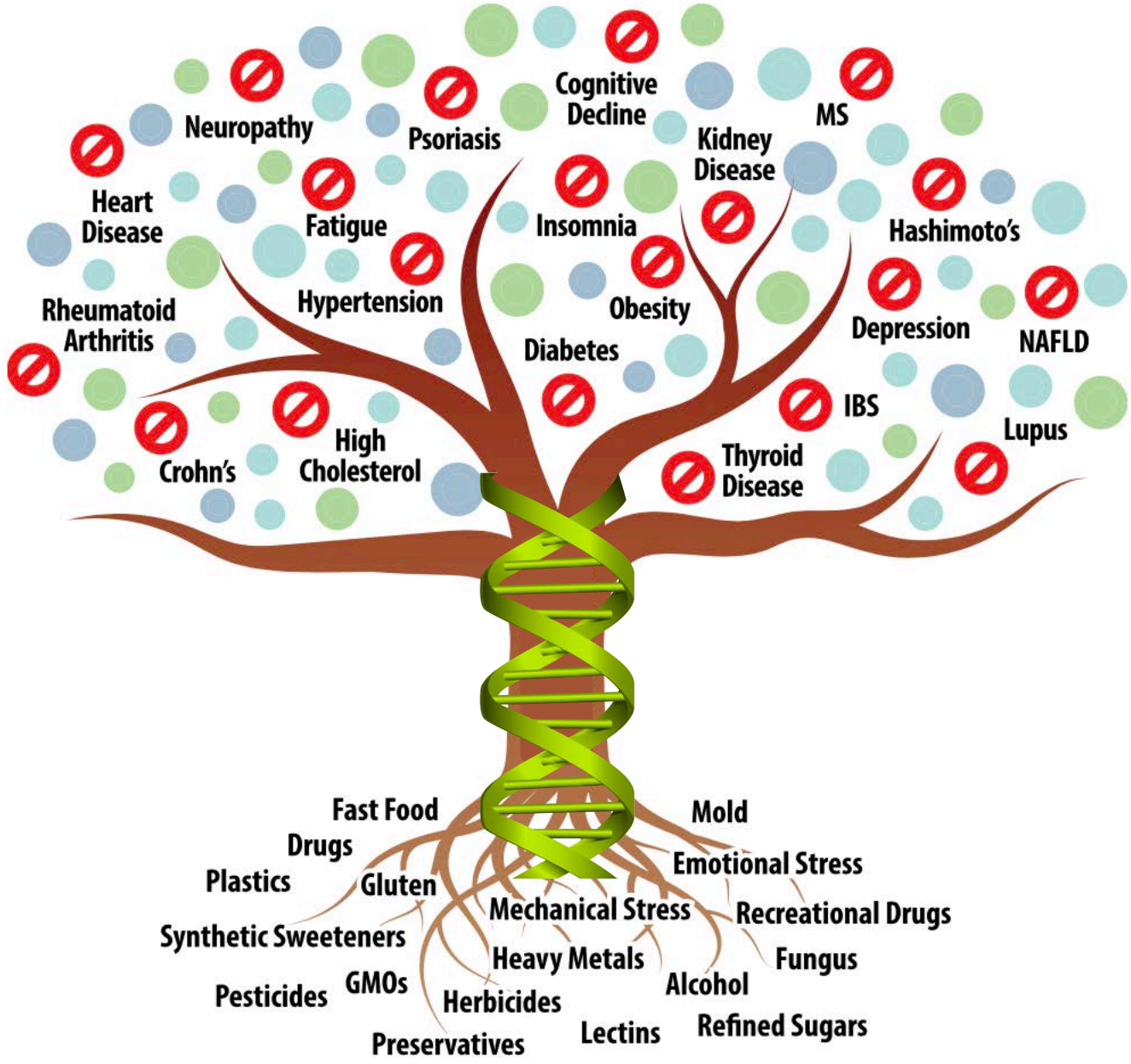
- Damaged cell membranes impair communication, affecting nutrient absorption, waste elimination, and hormone activation.

7. Hormonal Imbalances:

- Toxins interfere with hormones, either inducing, inhibiting, mimicking, or blocking their function.

8. Impaired Detoxification:

- Toxins hinder the body's natural detoxification systems, preventing the elimination of harmful substances.


Neuropathy
Psoriasis
Cognitive Decline
MS
Kidney Disease
Heart Disease
Fatigue
Insomnia
Hashimoto's
Hypertension
Obesity
Depression
NAFLD
Rheumatoid Arthritis
Diabetes
IBS
Lupus
Crohn's
High Cholesterol
Thyroid Disease
Fast Food
Mold
Drugs
Emotional Stress
Plastics
Gluten
Mechanical Stress
Recreational Drugs
Synthetic Sweeteners
Heavy Metals
Fungus
Pesticides
GMOs
Herbicides
Alcohol
Lectins
Refined Sugars
Preservatives

4 Types of Toxins

1. Heavy Metals:

- Examples include mercury, lead, cadmium, and arsenic.
- Commonly found in dental amalgam, contaminated water, and certain foods.

2. Biotoxins:

- Sources include mold, Lyme disease, and venomous spiders like brown recluse.
- Biotoxins can have systemic effects and contribute to chronic health issues.

3. Hidden Infections:

- Associated with dental issues like root canals and cavitations.
- Infections in these hidden areas can impact overall health.

4. Environmental Toxins:

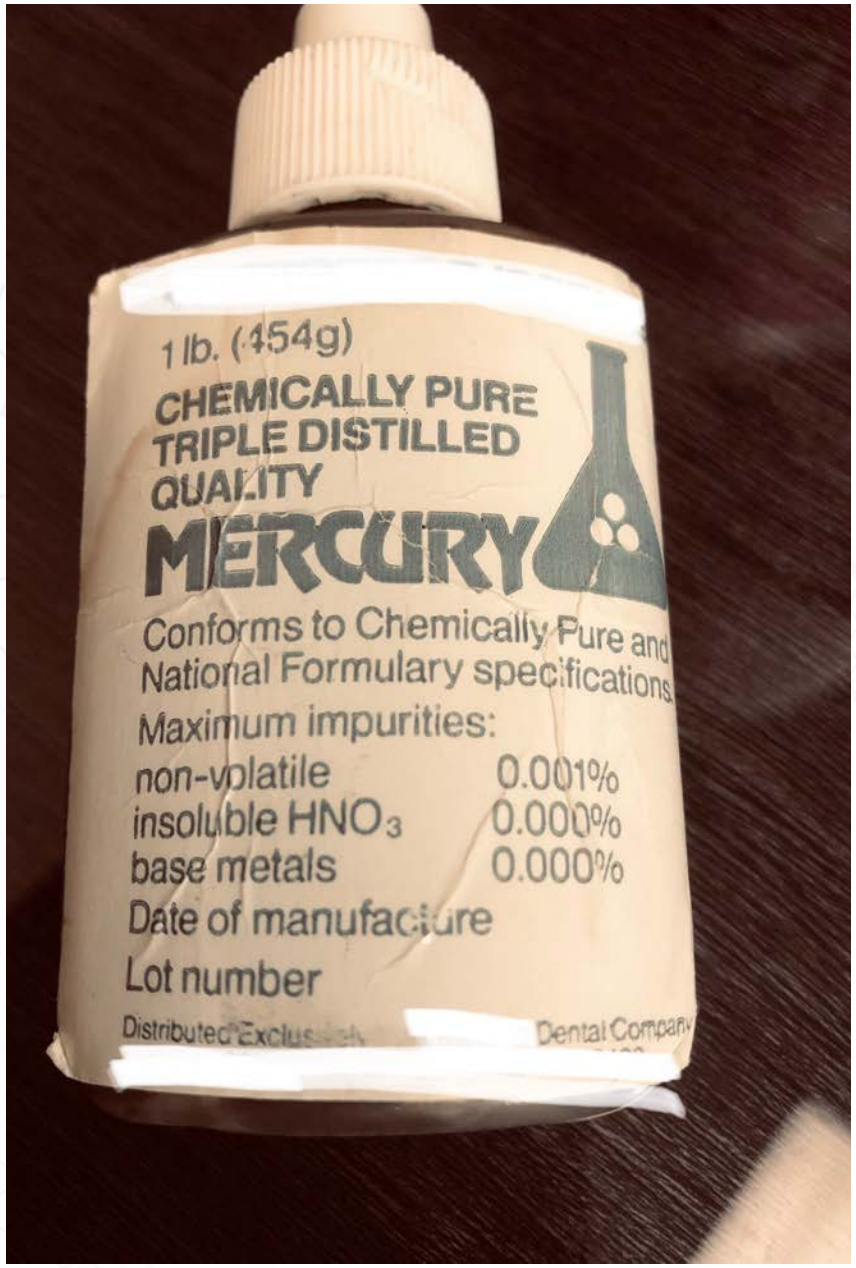
- Examples encompass fluoride, plastics, and pesticides.
- Exposure through water, food, and everyday products contributes to toxin accumulation.

Heavy Metal Exposure

- Moving forward, we'll delve into the specific category of heavy metals, with a focus on mercury.
- Our primary concern is the exposure to mercury, particularly from dental amalgam fillings.
- Dental amalgam, commonly known as silver fillings, is a significant source of mercury exposure.
- We'll explore how these fillings continuously release mercury vapors, leading to daily exposure.

Silver Fillings Composition

- **Components of Silver Fillings:**
  - **Mercury:** 45-55% by weight
  - **Silver:** 15-30%
  - **Copper:** 3-30%
  - **Tin:** About 10%
  - **Zinc:** About 1%
  - Every manufacturer may have a unique formula, leading to variations in concentrations.
- **Mercury Hazard:**
  - Mercury is considered hazardous and toxic material before placement in the mouth.
  - Removal requires treating it as toxic material and proper disposal due to its toxicity.
- **ADA Stance:**
  - ADA claims that when mixed with other materials, mercury becomes a "safe, stable material" in the filling.
  - Raises questions about why it's considered safe in the mouth but toxic when drilled out for removal.


1 lb. (454g)
CHEMICALLY PURE
TRIPLE DISTILLED
QUALITY
MERCURY
Conforms to Chemically Pure and
National Formulary specifications
Maximum impurities:
non-volatile 0.001%
insoluble HNO_3 0.000%
base metals 0.000%
Date of manufacture
Lot number


POISON
INGESTION MAY CAUSE DEATH.
NEUROTOXIC/NEPHROTOXIC INHALATION CAN CAUSE BRONCHIOLITIS,
PNEUMONITIS PULMONARY EDEMA
IRRITANT SENSITIZER TO SKIN AND
EYES. ACUTE EXPOSURE MAY CAUSE
REDNESS AND IRRITATION POSSIBLE
VISUAL DISTURBANCES. KEEP OUT
OF REACH OF CHILDREN. NOT FOR
FOOD OR DRUG USE.
Certified

Mercury Vapors and Accumulation

- **Mercury from Amalgam Fillings:**
  - Amalgam fillings continuously release mercury vapors, a process known as off-gassing.
  - Daily exposure occurs as we breathe in these vapors.
- **Toxic Load:**
  - Continuous absorption of mercury vapors leads to an accumulation in the body.
  - The concept of toxic load: gradual exposure results in symptoms when the body reaches its limit.
- **Generational Impact:**
  - Heavy metals like mercury can be passed down through generations.
  - Individuals may carry the toxins their ancestors were exposed to, even if they've never had amalgam fillings.

Mercury Toxicity

- **Elemental Mercury:**
  - Type that is in amalgam fillings, thermometers, and lightbulbs.
  - Stays liquid at room temperature.
  - Typically considered less toxic when compared to methyl mercury
- **Organic or Methyl Mercury:**
  - Formed when mercury combines with carbon.
  - Microscopic organisms in water and soil can convert elemental mercury to methyl mercury.
  - Commonly associated with seafood and fish exposure
- **Mercury Exposure**
  - Worldwide warning for consuming mercury tainted seafood is 2.3 micrograms a day
  - 1 single amalgam can release as much as 15 micrograms a day
  - The average person has 8 amalgam fillings which can add up to 120 micrograms a day!

Factors Influencing Mercury Release

- **Brushing and Flossing:**
  - Routine dental hygiene practices, such as brushing and flossing, contribute to increased mercury release.
  - Awareness needed, especially when floss comes in contact with amalgam fillings.
- **Temperature Sensitivity:**
  - Hot beverages or food intake can escalate the release of mercury vapors.
  - The heat amplifies the off-gassing process, emphasizing caution in consuming hot items.
- **Chewing Habits:**
  - Chewing gum or grinding teeth exerts constant pressure, elevating the temperature of the filling.
  - Increased pressure and heat result in more vapors being released.
- **Dental Procedures and Cleanings:**
  - Routine dental cleanings and polishing procedures can affect mercury release.
  - Galvanization, caused by opposing metals, can intensify the off-gassing.

- https://www.youtube.com/watch?v=pkLSjqccqAU

Methylation of mercury from dental amalgam and mercuric chloride by oral streptococci in vitro

U Heintze, S Edwardsson, T Dérand, D Birkhed

PMID: 6222462 DOI: 10.1111/j.1600-0722.1983.tb00792.x

The capacity of the oral bacteria Streptococcus mitior, S. mutans and S. sanguis to methylate mercury was investigated in vitro. Mercuric chloride and pulverized dental amalgam in distilled water, respectively, were used as sources of mercury. Methylmercury was found in the bacterial cells of all three tested strains. The results indicate that organic mercury compounds may be formed in the oral cavity.

Maternal amalgam dental fillings as the source of mercury exposure in developing fetus and newborn

LUBICA PALKOVICOVA[a], MONIKA URSINYOVA[a], VLASTA MASANOVA[a], ZHIWEI YU[b] AND IRVA HERTZ-PICCIOTTO[b]

dose for Hg of 5.8 μg/l in cord blood). A strong positive correlation between maternal and cord blood Hg levels was found ($\rho = 0.79$; $P < 0.001$). Levels of Hg in the cord blood were significantly associated with the number of maternal amalgam fillings ($\rho = 0.46$, $P < 0.001$) and with the number of years since the last filling ($\rho = -0.37$, $P < 0.001$); these associations remained significant after adjustment for maternal age and education. Dental amalgam fillings in girls and women of reproductive age should be used with caution, to avoid increased prenatal Hg exposure.

Journal of Exposure Science and Environmental Epidemiology (2008) **18,** 326–331; doi:10.1038/sj.jes.7500606; published online 12 September 2007

Ie. Generational Toxicity

Journal of Exposure Science & Environmental Epidemiology: 18, 326-331(2008)

https://rdcu.be/b1OXc

Mercury Toxicity

- **Affinity for Nerve and Fat Cells:**
  - Bioaccumulates on nerve cells and fat cells.
- **Phospholipid Bilayer and Fat Membrane:**
  - Affinity for fat layers in the phospholipid bilayer.
  - Potential accumulation on any cell in the body.
- **Methyl Mercury Translocation:**
  - Crosses the Blood-Brain Barrier (BBB) and Placental Barrier (PB).
  - Direct impact on the brain and potential harm to developing fetuses.

Mercury Toxicity

- **Interaction with Glutathione:**
  - Combines with glutathione, depleting antioxidant resources.
- **Oxidative Stress and Cellular Damage:**
  - Increased oxidative stress damages cells, proteins, and DNA.
  - Implication in aging and development of health conditions.
- **Associated Health Risks:**
  - Potential links to diabetes, cancer, and neurodegenerative diseases like Alzheimer’s.
- **Unlimited Symptom Range:**
  - Buildup of methyl mercury leads to diverse symptoms.

Symptoms May Include:

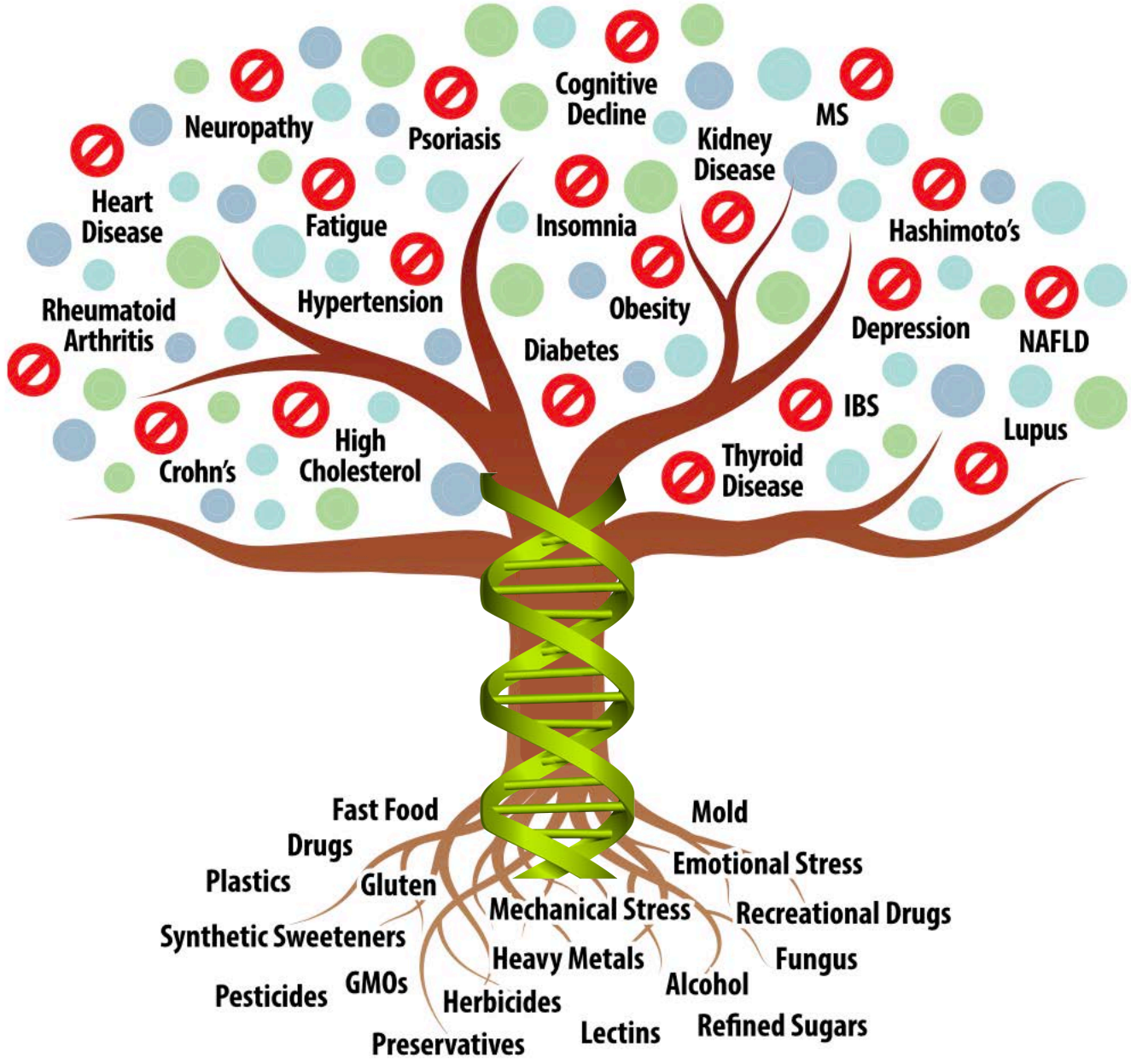
Weight loss resistance.

Hormone imbalances.

Brain fog.

Digestive issues.

Sleep disturbances.


Neuropathy
Psoriasis
Cognitive Decline
MS
Kidney Disease
Heart Disease
Fatigue
Insomnia
Hashimoto's
Hypertension
Obesity
Depression
NAFLD
Rheumatoid Arthritis
Diabetes
IBS
Lupus
Crohn's
High Cholesterol
Thyroid Disease
Fast Food
Mold
Drugs
Emotional Stress
Plastics
Gluten
Mechanical Stress
Recreational Drugs
Synthetic Sweeteners
Heavy Metals
Fungus
Pesticides
GMOs
Herbicides
Alcohol
Lectins
Refined Sugars
Preservatives

Health Conditions Associated with Dental Mercury Exposure		
Allergies, especially to mercury	Alzheimer's disease	Amyotrophic lateral sclerosis (Lou Gehrig's disease)
Antibiotic resistance	Autism spectrum disorders	Autoimmune disorders/ immunodeficiency
Cardiovascular problems	Chronic fatigue syndrome	Complaints of unclear causation
Hearing loss	Kidney disease	Micromercurialism
Multiple sclerosis	Oral lichenoid reaction and oral lichen planus	Parkinson's disease
Periodontal disease	Psychological issues such as depression and anxiety	Reproductive dysfunction
Suicidal ideations	Symptoms of chronic mercury poisoning	Thyroiditis

World Health Organization

According to THE WORLD HEALTH ORGANIZATION (WHO) Dental amalgam has been identified as the largest single source of continuous Hg exposure for members of the general population who possess amalgam fillings, (over 120 million Americans).

Recently published In the Journal for Alzheimer's Disease (2010)...

was a study that performed a meta-analysis of 106 case control or comparative cohort studies to associate mercury as a causative factor In Alzheimer's disease. Noting that the main source of mercury in the human body is dental amalgam (1 - 27 ug a day).

INORGANIC MERCURY HAS BEEN SHOWN TO CAUSE THE SAME BIOCHEMICAL HALLMARKS OF ALZHEIMER'S DISEASE

1. Neurofibrillary tangles (NFTs)
2. Beta-amyloid plaques
3. Tau-hyperphosphorylatlon
4. Decreased synapses
S. Insoluble brain tubulin
6. Numerous inactivated enzymes
7. Decreased hormone receptors in brain (mu oplode)
8. Increased glutatmate (excltotoxlc amino acid theory)

The synergistic effects of mercury with many of the toxicants commonly found in our environment make the danger of mercury unpredictable and possibly quite severe, especially any mixture containing elemental mercury, organic mercury, and other heavy metal such as lead and aluminum.

International Academy of IAOMT Oral Medicine & Toxicology

With the weight of the evidence there can be little doubt that mercury more likely than not causes AD and certainly would exacerbate this disease. Certainly, FDA's Final Rule on amalgam completely fails to address, much less refute, the concerns raised by this existing research. Perhaps in the near future, with help from international researchers, Alzheimer's disease will be renamed, "Mercury Induced Dementia".

www.IAOMT.org

Mitigating Mercury Exposure

- **Dietary Measures:**
  - **Antioxidant-Rich Foods:** Include fruits, vegetables, and foods high in antioxidants to combat oxidative stress.
  - **Organic and anti-inflammatory foods:** Minimally need to follow Toxic Top Ten.
- **Detoxification Support:**
  - **Hydration:** Drink plenty of water to aid the body's natural detoxification processes.
  - **Lymphatic Drainage:** Manual drainage support, movement such as rebounding, and dry brushing.
- **Supplementation:**
  - **21 Day Metabolic Clearing Protocol:** Support the body's detoxification pathways and foundational functions.
  - **Glutathione:** Replenish depleted stores and assist in cell healing and detoxification.
    - GSH and Super G Antioxidant
  - **Binder Pro**: Need to ensure that the toxins are being removed from the body and not being reabsorbed.
  - **MDS:** Methylation support
  - **Hepato-CL:** Liver support and Detoxification.
  - **GI Resq:** GI integrality

J Toxicol. 2014; 2014: 491316.
Published online 2014 Oct 2. doi: 10.1155/2014/491316
PMCID: PMC4202242
PMID: 25349607

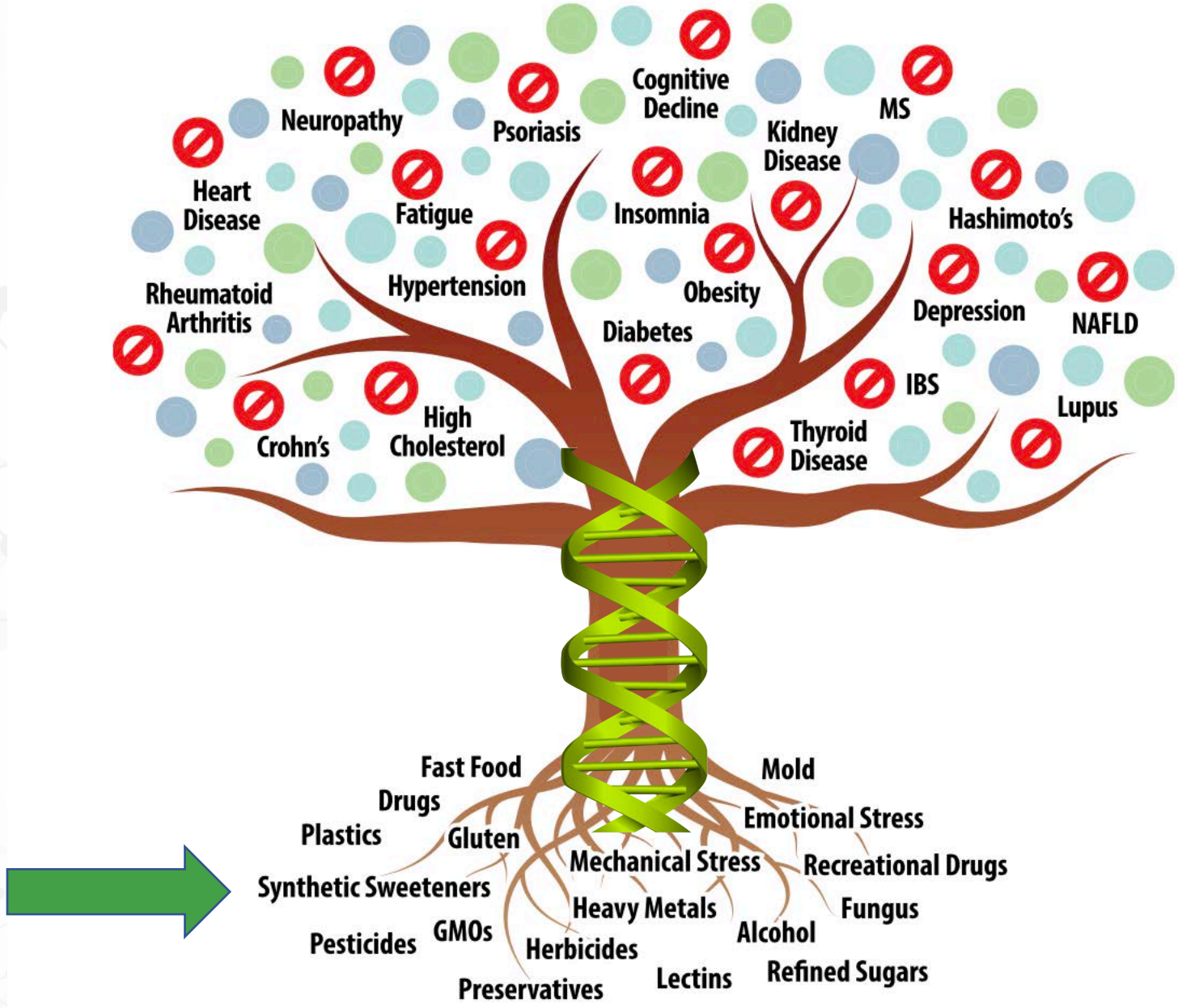
Aluminum-Induced Entropy in Biological Systems: Implications for Neurological Disease

Christopher A. Shaw, [1,2,3,*] Stephanie Seneff, [4] Stephen D. Kette, [5] Lucija Tomljenovic, [1] John W. Oller, Jr., [6] and Robert M. Davidson [7]

subsystems and can cause catastrophic failures ending in death. Al forms toxic complexes with other elements, such as fluorine, and interacts negatively with mercury, lead, and glyphosate. Al negatively impacts the central nervous system in all species that have been studied, including humans. Because of the global impacts of Al on water dynamics and biosemiotic systems, CNS disorders in humans are sensitive indicators of the Al toxicants to which we are being exposed.

Find the Right Dentist

- **Not all Dentists are Created Equal**
  - SMART Certified vs Mercury Free vs Traditional
  - https://iaomt.org/
  - https://iabdm.org/
- **Silver Fillings Should NOT be removed during the following situations:**
  - Pregnancy
  - Breast Feeding
  - Wrong Dentist ie not SMART Certified
- **Key Reasons for Safe Removal**
  - Silver fillings release mercury vapors constantly but peak exposure occurs during placement and removal.
  - Drilling silver fillings generates heat, vaporizing mercury and increasing inhalation risk.


Neuropathy
Psoriasis
Cognitive Decline
MS
Kidney Disease
Heart Disease
Fatigue
Insomnia
Hashimoto's
Hypertension
Obesity
Depression
NAFLD
Rheumatoid Arthritis
Diabetes
IBS
Lupus
Crohn's
High Cholesterol
Thyroid Disease
Fast Food
Mold
Drugs
Emotional Stress
Plastics
Gluten
Mechanical Stress
Recreational Drugs
Synthetic Sweeteners
Heavy Metals
Fungus
Pesticides
GMOs
Herbicides
Alcohol
Lectins
Refined Sugars
Preservatives