THE HEAVY METAL TOXICITY GUIDE

TOPICS: SYMPTOMS & ROOT CAUSE OF TOXICITY, LONG-TERM EXPOSURE & CONSEQUENCES, TESTING & TREATMENT FOR HEAVY METALS.

WE ARE EXPOSED TO HEAVY METALS EVERY DAY.

The ART of LIFE
HEALTH CENTER

The information provided in this Guide does not replace services of a licenced health care professional. Please do not use this book to treat or diagnose a medical condition.

Always consult a health care professional for proper diagnosis and the right treatment for you.

POOR HEALTH & WELLBEING MAY BE A RESULT OF **HEAVY METAL TOXICITY**

We are exposed to heavy metals every day.

Topics: Symptoms & Root Cause of Toxicity, Long-Term Exposure & Consequences, Testing & Treatment for Heavy Metals.

The purpose of this Guide is to provide information on heavy metal toxicity and impact it has on chronic disease.

8 out of 10 deaths are due to heart disease, respiratory/ lung disease, and cancer which are known to be associated with heavy metal toxicity. Other diseases heavy metal toxicity related to are stroke, Alzheimer's, neurodegenerative, autoimmune disease, and other medical conditions.

It is important to be aware of the environment we live in, it's effects on our health and knowing our options and steps that are available if we wish to change our approach to our health.

Our health issues are closely related to exposure to Heavy Metals which exists due to pollution (air quality), contaminated water, genetically modified foods, toxic ingredients in products and medications we use.

A lot of health issues and concerns go undiagnosed but are still treated for symptoms instead of addressing the root cause of the problem.

Are you or your loved ones suffering from or treated for the following issues but have not seen any results or improvement?

- Heart Disease
- Cancer
- Liver & Kidney Disease
- Circulatory & Immunity Issues
- Anxiety & Depression
- Behavioral & Emotional Issues
- Chest Pains
- Eczema
- Thyroid Issues
- & more

In some cases, there is a deeper underlying cause for your symptoms and ineffectiveness of treatments.

Our body has a natural ability to heal and detoxify itself but if we are consistently suffering from the same issue, that means our body is not working properly and therefore does not have the capability to heal itself.

Today we will discuss affect of Heavy Metals on your body, health, and your options to start your journey to better health and wellbeing.

What Are Heavy Metals?

We all heard of heavy metals before. Some of heavy metals are natural and part of our ecosystem and environment which means we are exposed to them on daily basis.

Some metals, in small amounts, are essential for survival and carry out proper bodily function but constant exposure in large doses is extremely dangerous to our health.

Long-Term Consequences of Heavy Metal Toxicity

Accumulation of them over time within our body can lead to chronic disease such as cancers, neurological problems, cardiovascular disease, type 2 diabetes, and other health issues.

Unfortunately, due to human activity and more presence of these metals in our environment has caused concerns for humans, animals, land, and sea.

Common Heavy Metals & Their Impact on Health

Common heavy metals we are exposed to are aluminum, mercury, copper, nickel, arsenic, lead, cadmium, and chromium.

The Consequences listed below are to assist you to make informed decisions when it comes to your health, diet, and environment.

<u>These Metals Accumulate in our:</u>

- Liver
- Spleen
- Kidney
- Lungs
- Brain
- Bones

Risk level depends on factors such as age, health, diet and how effectively your body can detox itself.

ALUMINUM

Aluminum can be found in food, cosmetics, medicines, deodorants, foil wrap, soda cans, water purification facilities, hand & face creams.

Long- Term Consequences due to Exposure can cause issues such as:

- Kidney & Liver Disease
- Ulcers & Heartburn
- Impact on Nervous System & Fine Motor Skills
- Slow growth in children
- Premature birth
- Weak bones & teeth decay

Suspended particles of dust in the air contain aluminum, resulting in small amounts of it been found in lung tissue and lymph nodes. Aluminum interferes with neurotransmitters in our brain such as dopamine and norepinephrine therefore causing damage which can lead to neurodegenerative disease such as Alzheimer's and Parkinson's. Those with pre-existing medical conditions are at greater risk.

MERCURY

Mercury is found in fish, shellfish, and at the bottom of ocean floor due to industrial pollution. It is used by dentists, hygienists, and chemical workers.

Long- Term Consequences due to Exposure can cause issues such as:

- Headaches
- Breathlessness & Chest Pains
- Pneumonia
- Behavioral/ Neurological Changes
- Memory Loss
- Gingivitis

Mercury toxicity may be caused by exposure to large amounts of it during the manufacturing of thermometers, mirrors, incandescent lights, x-ray machines, and vacuum pumps.

This metal affects our lungs, liver, kidneys, brain, skin and causes damage to our neurological system.

ARSENIC

Arsenic can be found in our drinking water, seafood, grains (rice), cigarette smoke, cosmetics, and air.

Long- Term Consequences due to Exposure can cause issues such as:

- Chronic Headaches/ Fatigue
- Brain Damage/ Nerve Disease
- Eczema
- Gastrointestinal issues
- Breakdown of the Hemoglobin
- Anemia
- Hypotension
- Heart Issues

Arsenic toxicity can be caused by medications and some face and hand creams. Occupational exposure can occur through manufacture of paints, enamels, glass, metals, and wood preserving materials.

CADMIUM

Cadmium toxicity may be caused by ingestion of contaminated foods, exposure to old paint, cigarette smoke, vapor lamps, and can also be found in rechargeable batteries.

Long- Term Consequences due to Exposure can cause issues such as:

- Progressive loss of lung function
- Abnormal buildup of fluid within the lungs
- Breathlessness
- Increased salivation
- Yellowing of the teeth
- Rapid heartbeat
- Anemia
- Kidney Disease

CHROMIUM

Chromium is used in the manufacture of cars, glass, pottery, and linoleum.

Long- Term Consequences due to Exposure can cause issues such as:

- Lung Cancer
- Kidney & Liver Diseases
- Gastrointestinal Issues
- Circulatory Issues
- Lesions on kidneys, liver, and muscular layer of the heart
- Neurological disorders

Chromium results from burning coal and oil. Paper, leather, and rubber manufacturers use chromium.

LEAD

Lead toxicity can come from exposure to firearms, automotive repair, battery manufacturing, gasoline, glass, bridge, tunnel, and highway construction sites. Another cause of lead exposure can happen through hair dyes, fertilizers and pesticides use.

Long- Term Consequences due to Exposure can cause issues such as:

- Abdominal Pain & Constipation
- Anemia
- Brain Damage
- Swelling of the Optic Nerve
- Impaired Consciousness
- High Blood Pressure
- Damage to the Reproductive Organs
- Kidney Disease
- Hostility, Depression, Anxiety & Irritability
- Behavioural issues in children

COPPER

Copper can be found in water supply due to old copper pipes, contaminated food, rusted dishes including corroded copper cocktail shakers.

Long- Term Consequences due to Exposure can cause issues such as:

- Depression/ Anxiety
- Kidney / Liver Issues
- Heart Failure
- Brain Damage

Some genetic conditions can also affect your liver's ability to filter out copper properly such as:

- Wilson's Disease
- Hepatitis
- Anemia
- Thyroid issues
- Leukemia
- Lymphoma
- Rheumatoid Arthritis & more

IRON

Iron *can be found* in children's and adult's supplements/ vitamins. Taking too many Iron supplements can have dangerous effects such as:

- Liver Failure
- Major Digestive Problems
- Circulatory System issues

Iron is an important mineral for our body to function properly and a lot of people suffer from iron deficiency but too much can lead to health issues. It is particularly important to read the label for proper pill intake. The child can simply swallow too many vitamins and the expectant mother can take too many.

NICKEL

Nickel can be found in our food, water, soil as well as cigarette smoke.

Long- Term Consequences due to Exposure can cause issues such as:

- Lung Cancer
- Reduction in cell growth
- Damage to Nervous System
- Damage to Heart & Liver

Nickel is combined with other metals, such as iron, zinc, copper, and chromium to form alloys. It is used to make stainless steel, jewelry, coins, heat exchangers and valves.

Nickel enters our atmosphere through volcano eruptions, power plants and trash incinerators. Once it's airborne, it attaches to dust particles, rain or snow and over time it falls to the ground where it enters soil.

Testing & Treatment for Heavy Metal Toxicity

As we mentioned before, some metals are important to our survival and critical for bodily function in small amounts, but in large doses they accumulate in our body and cause damage to our heart, kidney, liver, brain, and bones which can lead to chronic disease.

Not all symptoms result from heavy metal toxicity, they can be the cause of other conditions and diseases. It is always best to have a medical professional help determine the cause and if it is the result of toxicity.

If you suspect heavy metal toxicity, a healthcare provider can order certain tests to confirm diagnostics, test can be done by taking samples of your blood, urine, and hair.

When you come to the Art of Life Health Centre, for an appointment to see our *Naturopathic Doctor* (click to read more), the following steps will be taken in order to assess your situation and implemented appropriate treatment plan.

Assessment, Test & Treatment

- A Detailed Assessment of your health history will be performed. (including your daily habits, routine, diet, exercise, pre-existing heath conditions and possible genetic predispositions to diseases).
- A Naturopathic doctor can order tests to provide you with a list of heavy metals and essential minerals (click to read more) in your body and the amounts of it.
- Test can be performed in variety of ways such as urine, blood, and hair. Children can be testes as well.
- After you submit your sample, the test results will be emailed to our office for Doctor's review. You will receive a call to come in to follow and discuss the results.
- A unique treatment plan will be tailored to your needs based on your test results. Treatment options may include the following:
    - Specific Diet
    - Supplements
    - Intravenous Vitamin Therapy with specific content based on your needs and toxicity levels (including Vitamin C, Selenium, Glutathione and more).
    - Herbal Medicine
- The treatment duration varies due to level of toxicity, it can take anywhere from 4 to 6 weeks, up to a few months.

The treatment is a type of Chelation Therapy which assists in detoxifying your system.

You may want to consider doing this test in order to prevent future health concerns as well. If your body is working as it's intended, it can effectively detoxify toxicity within your system while leaving essential nutrients, minerals, proteins and other metals intact.

Before & After the Treatment for Heavy Metal Toxicity

GENOVA DIAGNOSTICS

63 Zillicoa Street
Asheville, NC 28801
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Patient: A.
F
DOB: December 06,
Sex: M
MRN: 0002052251

Order Number: O8070625
Reported: August 20, 2020
Received: August 07, 2020
Collected: July 03, 2020
Route Number: 108180627

Toxic Elements

Results in µg/24 hours

Element	Reference Range	Reference Range
Lead	11.7	<= 1.5
Mercury	5.65	<= 2.17
Aluminum	19.3	<= 25.2
Antimony	0.068	<= 0.144
Arsenic	39	<= 49
Barium	4.4	<= 5.5
Bismuth	<dl	<= 2.26
Cadmium	0.14	<= 0.63
Cesium	6.74	<= 10.10
Gadolinium	<dl	<= 0.019
Gallium	0.030	<= 0.031
Nickel	3.17	<= 4.41
Niobium	<dl	<= 0.086
Platinum	<dl	<= 0.038
Rubidium	1,509	<= 2,486
Thallium	0.390	<= 0.273
Thorium	<dl	<= 3.911
Tin	0.67	<= 2.25
Tungsten	0.038	<= 0.264
Uranium	<dl	<= 0.027

GENOVA DIAGNOSTICS

63 Zillicoa Street
Asheville, NC 28801
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Patient: A.
F
DOB: December 06,
Sex: M
MRN: 0002092295

Order Number: P0010365
Reported: October 09, 2020
Received: October 01, 2020
Collected: September 28, 2020
Route Number: 108731135

Toxic Elements

Results in µg/g creatinine

Element	Reference Range	TMPL	Reference Range
Lead	0.8		<= 1.4
Mercury	1.17		<= 2.19
Aluminum	1.9		<= 22.3
Antimony	<dl		<= 0.149
Arsenic	5		<= 50
Barium	1.5		<= 6.7
Bismuth	<dl		<= 2.28
Cadmium	0.12		<= 0.64
Cesium	2.3		<= 10.5
Gadolinium	0.006		<= 0.019
Gallium	0.012		<= 0.028
Nickel	1.60		<= 3.88
Niobium	<dl		<= 0.084
Platinum	<dl		<= 0.033
Rubidium	690		<= 2,263
Thallium	0.115		<= 0.298
Thorium	<dl		<= 4.189
Tin	0.20		<= 2.04
Tungsten	0.015		<= 0.211
Uranium	<dl		<= 0.026

Heavy Metals in Food, Water, Air & Consumer Products

Heavy metals are everywhere, exposure can occur through our food, water, air, commercial products, and medications.

Heavy Metals in Food

A great place to start is by evaluating your diet & everyday food choices, avoiding certain foods will help keep your body healthy. Heavy metals have been found in commercial foods in both organic and non-organic. Children are at a higher risk of metal toxicity because their smaller bodies are more susceptible to absorbing and retaining them.

Three Types of Food That Contain Heavy Metals

1. FISH: Mercury is commonly discovered in large predatory fish. Most common contami nated fish include tuna, king mackerel, marlin, orange roughy, shark, swordfish, and tile fish.
2. RICE: Recent studies found that rice is one of the most arsenic-contaminated foods on the market. Brown rice is among the worst. Grains like quinoa, amaranth, bulgur, farro, polenta, and millet usually contain little arsenic.
3. BONE BROTH: Bone broth can be a significant source of lead because bones store it and when we cook them, the contents will remain in the end.

Heavy Metals in Drinking Water

Heavy metals enter our water through soil contamination. It might be a good idea to have your water tested for heavy metals, especially if you have a well or older plumbing. Another advice is to invest in a high-quality water filtration system for your home.

Heavy Metals in Consumer Products

Heavy metals such as iron, mercury, arsenic, lead, chromium, aluminum, and zinc have been found in personal care products like makeup, toothpaste, hand & face creams, sunscreen, eye drops, and nail polish. Heavy metals in personal care products may result from contamination but sometimes they are added as ingredients.

Heavy Metals in the Air (Indoors & Outdoors)

Heavy metals also exist in the air. Arsenic is one of the most common metals in the atmosphere especially in and near the cities. Other airborne heavy metals include cadmium, chromium, and nickel from activities such as driving cars, industrial pollution and using aerosol products. Best advice is to get a home air purifier and consider removing shoes before walking inside your home. This prevents tracking heavy metals inside the house and inhaling them later.

6 Foods That Assist with Heavy Metal Detoxification

"When your body is working properly, it can protect you from heavy metal accumulation."

Certain foods contain micronutrients that can assist to remove unwanted toxins within your body:

1. CRUCIFEROUS VEGETABLES: Your liver has enzymes that work to flush out toxins from your body. You can boost these enzymes by eating vegetables such as, broccoli, bok choy, cauliflower, brussels sprouts, and kale.
2. FIBER: Fiber is found in plant foods that help bind to cadmium, arsenic, mercury, lead, copper, and aluminum which makes it easier for your body to detox these metals.
3. PHYTATES: This plant food inhibits iron absorption and can help remove excess iron in the body. Grains like nuts and legumes all contain phytates.
4. PROBIOTICS: Probiotics play a role in helping your body detox heavy metals. Studies showed that lactis bacteria are effective in reducing lead, mercury, and arsenic absorp tion in the body. Yogurt is a great source of a probiotic.
5. CILANTRO: Studies found that eating cilantro can help reduce absorption of heavy metals. Cilantros assist in elimination of mercury, lead, and aluminum.
6. BLACK SESAME SEEDS: Black sesame seeds help remove heavy metals from the body by binding to lead, cadmium, and mercury.

Other Foods That are High in Antioxidants

These foods have a potential to remove cadmium and iron from your system and to reverse damage to various organs and tissues while improving kidney, liver, and brain function.

- Soybeans
- Onions
- Curry paste
- Grapes
- Garlic
- Ginger
- Green tea
- Tomato paste
- Algae (chlorella and spirulina)

Modern world has increased our exposure to heavy metals beyond what our bodies were designed for. Even though we cannot avoid these heavy metals entirely, we can all take steps to reduce the exposure. Making informed choices when it comes to the products we use, foods we eat, water we drink, and daily habits, will significantly reduce the amount of toxins that renter our body.

Take care of yourself & your body!