

Where do the metals come from?

All of us have a certain level of toxicity. The toxins that we have in our body have been building up over a lifetime. Even in utero we are susceptible to toxic element that can affect our health. For most of us it is the environment that has exposed us to toxins. On a daily basis the food we eat, the water we drink, and the air we breath all contain low levels of toxins that have the ability to accumulate in our bodies.

Metallic Lunch: An Analysis of Heavy Metals in the Canadian Diet

Metallic Lunch: An analysis of heavy metals in the Canadian diet is a warning cry to the federal government to respond to the disturbing reality of food pollution. The report call on Health Canada to develop policies, regulations, and monitoring systems that will phase-out heavy metal releases to the environment, and protect our food from toxic pollution. Unpublished federal government data obtained by Environmental Defense Canada shows that Canadians' food is polluted with heavy metals.

For our aging population the burden of a lifetime of metal accumulation is now showing in many health-related issues. The metals and toxic chemicals that we have been exposed to are associated with cancer, hormone disruption, reproductive disorders, respiratory illness and many other debilitating diseases.

Toxic Nation

The groundbreaking report, Toxic Nation: A Report on Pollution in Canadians, reveals that toxic chemicals, such as DDT, PCBs, stain repellants, flame retardants, mercury and lead, are contaminating Canadians.

The report is the first in Canada to test for a broad range of chemical in average Canadians from across the country, and it demonstrates that toxic chemicals contaminate people no matter where they live, how old they are or what they do for a living.

The more alarming risk is to the young population. With the exposure to substantial levels of toxins and heavy metals potentially starting from the mother's womb, today's children are at greater risk to developing disorders that are linked to these contaminants.

Polluted Children, Toxic Nation: A Report on Pollution in Canadian Families

Polluted Children: Toxic Nation is the first Canadian study to test for harmful chemicals in childrens bodies, and the results show that Canadians young and old are polluted regardless of where they live, work, play or go to school.

*For the study, Environmental Defense tested children and parents from five Canadian families for 68 chemicals, such as pesticides, PCBs, stain repellants, flame retardants, **mercury and lead**. Many of the chemicals and heavy metals discovered in the families are associated with cancer, hormone disruption, reproductive disorders, damage to the nervous system, respiratory illnesses and*

harming the development of children. In some cases, the children in the study had higher levels of certain chemicals than their parents.

Mercury Toxicity

Mercury is one of the more insidious metals that accumulates in our bodies and can cause serious health problems. A group of international scientist issued findings the week of March 11, 2007 on mercury pollution. They include:

- 1) On average, three times more mercury now falls from the sky than before the Industrial Revolution 200 years ago.
- 2) Increasing mercury emissions from developing countries have offset declining emissions from developed nations during the past 30 years.
- 3) Methylmercury exposure at present levels constitutes a public health problem in many parts of the world.
- 4) Methylmercury exposure may increase the risk of cardiovascular disease, particular in adult men.
- 5) The risk posed by mercury contamination of fish warrant issuing a worldwide warning to the public, especially children and women of childbearing age, to be careful about how much and which fish they eat.
- 6) The actual socioeconomic costs of mercury pollution are probably much greater than estimated because existing economic analyses don't consider mercury's impacts on ecosystems and wildlife.
- 7) The unregulated use of mercury in small-scale gold mining is polluting thousands of sites around the world, posing long-term health risks to an estimated 50 million people and contributing more than 10percent of the mercury in Earth's atmosphere attributable to human activities.

Over the past year there have been a number of warnings regarding the consumption of fish due to the high levels of mercury. In some species of fish the levels are so high that consumption of no more than once per month is recommended. Why is it that fish can survive with mercury levels that are deemed dangerous to humans? The answer lies in how our bodies deal with the various forms of mercury.

Fish survive mercury contamination by being able to enzymatically methylate the mercury into a form (methylmercury) that is not harmful to it. Mammals such as humans, on the hand, will consume this "safe" form of mercury (organic) and over time oxidize into the more dangerous form - inorganic mercury. Our bodies will absorb organic mercury very well and once in the blood stream can pass across the blood-brain barrier. If it stayed in this form we would not have a problem, unfortunately the organic form will over time be oxidized to the harmful inorganic form. This slow process of oxidation is one of the main reasons we do not see the effects of long-term low exposure to mercury for a long period of time.

In addition to the exposure to mercury from the environment another serious source of low-level exposure is through amalgams. For years and continuing today amalgams have been used as a low cost material to fill cavities.

From a scientific point of view, there is no doubt to the potential harmful health effects caused by the release of mercury vapors from the fillings. The studies done on monkeys at the University of Calgary showed how mercury released from freshly and correctly placed amalgam fillings appeared quickly in the kidneys, brain, and wall of the intestines. In addition mercury bonds very firmly to structures in the nervous system. Mercury moves up the axons of the nerves to the spinal chord and brainstem. Once it has traveled up the axon, the nerve cell is impaired in its ability to detoxify itself and in its ability to nurture itself. The cell becomes toxic and dies or lives in a state of chronic malnutrition.

Mercury and chronic infections

The presence of mercury in the tissues represses the body's own immune system. It has been observed by health-care practitioners that patients diagnosed with chronic infections often have dramatic recoveries following a mercury Detox program.

Many of the organisms that cause chronic illnesses such as candida, strep, staph, and amoebas have an affinity to mercury. Thus a toxic mercury load will eventually wear down the body's ability to deal with the organism which thrives in the presence of mercury. Therefore, antibacterial/antifungal protocols will work but only temporarily unless the underlying metal issue is resolved.