ALUMINUM

Aluminum is a toxic metal that is found widely in our present-day environment in places such as anti-perspirants, anti-acids, aluminum in cookware and “tin foils”, aluminum used in the deodorant stones and crystals, aluminum in clays like zeolite, bentonite and azomite and hundreds of other products. It is also added to municipal water supplies and used as a preservative in vaccines.

Aluminum is called the soft-in-the-head mineral because it affects the brain, impairing memory and cognition.

SOURCES OF ALUMINUM TOXICITY

- aluminum-containing anti-perspirants and deodorants
- beverages from aluminum cans unless the can is coated on the inside
- food cooked in aluminum cookware or foil
- aluminum-containing antacids
- drinking water
- baking powders used in many baked goods
- table salt – aluminum usually added as an anti-caking additive
- processed cheese
- bleached flour
- Fluoridated water increases leaching of aluminum from aluminum pots and pans.
- Prepared foods made with tap water or salt usually contain aluminum. This includes all baked goods, sauces, almost all beverages such as sodas and juices.
- Children are often born with elevated aluminum that is passed from mother to fetus through the placenta.

DETECTION OF ALUMINUM TOXICITY

Blood – levels do not indicate total body load of aluminum.

Hair -- levels appear to correlate well with bone levels of aluminum. Several hair tests may be needed before aluminum is revealed on the test, as it may be sequestered within body tissues.

HOW ALUMINUM AFFECTS HEALTH

Nervous system -- In animal studies, aluminum blocks the action potential or electrical discharge of nerve cells, reducing nervous system activity. Aluminum also inhibits enzymes in the brain (Na-K-ATPase and hexokinase). It may also inhibit uptake of important chemicals by nerve cells (dopamine, norepinephrine and 5-hydroxytryptamine).

Behavioral effects -- Dementia resulting from kidney dialysis related to aluminum toxicity causes memory loss, loss of coordination, confusion and disorientation.

Digestive system -- Aluminum reduces intestinal activity. It is used in many antacids. An excess may cause colic.

SYMPTOMS OF ALUMINUM TOXICITY

Early symptoms: flatulence, headaches, colic, dryness of skin and mucous membranes, tendency for colds, burning pain in the head relieved by food, heartburn and an aversion to meat.

Later symptoms: paralytic muscular conditions, loss of memory and confusion. Other symptoms may include: brain fog, memory loss, Alzheimer's disease, amyotrophic lateral sclerosis, hemolysis, leukocytosis, porphyria, colitis, dental cavities, hypoparathyroidism, kidney dysfunction, liver dysfunction, neuromuscular disorders, osteomalacia, Parkinson's disease, ulcers

ALUMINUM AND HAIR ANALYSIS

Ideal levels -- The ideal human hair aluminum should probably be 0.3 to 0.4 mg% or 3-4 parts per million. This is lower than many labs suggest.

Poor eliminator -- A hair aluminum that is less than about 0.3 mg% or 3 parts per million is called a poor eliminator pattern for aluminum. This means that one has plenty of aluminum, but the body cannot eliminate it properly. It is an important hair analysis indicator.

Very poor eliminator -- A hair aluminum level less than about 0.15 mg% is called a very poor eliminator pattern. The meaning is similar to a poor eliminator pattern, only more extreme. That is, the body is having difficulty eliminating its aluminum, which is a bad sign. For some reason, taking antibiotics can cause this difficulty. The antibiotics build up in the liver, apparently, preventing proper elimination of aluminum.

Toxicity common -- Most hair tests indicate elevated hair tissue aluminum. This is not surprising as it is high in clay soils, in many foods and in the environment.

Rise in aluminum on a hair retest -- Hair levels may rise on retest hair mineral analyses during a nutritional balancing program as more aluminum is mobilized from tissue storage sites.

Hidden aluminum toxicity -- Hidden aluminum indicators on a properly performed hair mineral analysis include a hair manganese above 0.04 mg%, a hair iron above 2 mg% and perhaps elevated chromium or selenium. These elements collectively are called the 'friends. as they are often found together.