Need for Toxic and Nutrient Elements (RBC I WB, Hair)

The main causes of modern diseases are heavy metals accumulated in human tissues as toxic substances, threatening human health, and a lack of minerals essential for physical activity. The following are the main symptoms of heavy metal/mineral accumulation in the body. Check for any of the following symptoms.

- ☐ My hair is rapidly falling out, and skin diseases are frequent.
- ☐ I still feel tired even after sleeping.
- ☐ I have poor digestion.
- ☐ I am sick for no reason.
- ☐ I feel tightness in my chest and often have a headache.
- ☐ I feel anxious and depressed.
- ☐ I am often forgetful.
- ☐ I feel pain in my joints and have osteoporosis.
- ☐ My child is too small compared to other children.
- ☐ I am distracted and unable to concentrate.

Depression can be improved by removing the mercury accumulated in the body and receiving nutritional treatment. **Attention deficit and hyperactivity** in children with ADHD **can be reduced** with treatment to lower heavy metal concentrations.

After testing for Toxic and Nutrient Elements, consult a specialist.

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(RBC I WB, Hair)

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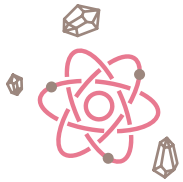
Contamination by the accumulation of **heavy metals** in the body and **nutritional imbalance** are warning signals to your brain and nervous system.

Dangers of heavy metals



Heavy metals can accumulate in body tissues or others through various channels such as occupational exposure, diet, and lifestyle. Prolonged exposure may have harmful effects on the human body. The more toxic elements accumulate in the body, the greater the risk of cardiovascular disease, psychoneurotic disease, chronic neurological disease, chronic respiratory disease, metabolic disease, osteoarthropathy, and various skin diseases, including hair loss.

Are even trace minerals dangerous?

Minerals, present in trace amounts, though, play an essential role in all functional activities in the body. Deficiencies in essential minerals can lead to growth retardation, learning disabilities, chronic fatigue, and osteoporosis. Though essential for the body, excessive amounts of nutrients can cause serious toxic symptoms. Therefore, a prescription should be given only when a deficiency is suspected from the patient's symptoms and tests.

Symptoms related to metal toxicity or deficiency

Aluminum	When encephalopathy or dementia occurs during renal dialysis (In dialysis encephalopathy or dementia)
Arsenic	When the patient reports bilateral pain radiating from feet to legs (When the patient reports bilateral pain radiating from feet to leg)
Cadmium	When renal disease occurs in painters who inhale airborne mist (Renal disease in aerosol painters)
Copper-Zinc deficiency	When wound healing is delayed (Induced loss of wound healing)
Lead	When children under age 2 live in older homes (In children under age 2 living in older homes)
Mercury	When there are acute changes in behavior (Acute changes in behavior)
Manganese	When Parkinson's disease occurs in people under the age of 50 (Onset of Parkinson's under age 50)
Selenium deficiency	When patients undergo total parenteral nutrition (In patients undergoing total parenteral nutrition)
Thallium	When acute hair loss occurs (Acute hair loss)
Zinc deficiency	When burn patients exhibit erythema (Burn patients exhibiting erythema)

The mercury test is important for adults

Mercury accumulation in adult males in Korea is higher than in many Western countries. Therefore, regular mercury tests should be performed with hair samples that show the mercury level in the body accumulated over a long period to prevent mercury toxicity and to take appropriate measures at an early stage.

Blood lead concentration in infants is of concern

It is well known that lead can cause irreversible brain damage, especially in infants. Even very low accumulation in the body can lead to lifelong intellectual decline and developmental disability. In the United States, it has been observed for several years that infants under the age of 5 have higher blood lead concentrations than adults. The U.S. government implemented a policy to reduce lead toxicity in infants by adding a lead test to routine infant checkups for 15 years since 1997. In 2012, the U.S. launched a campaign to protect infants from trace amounts of lead.

A recent domestic study using hair samples found that infants accumulated more lead than adults. Infants mainly live on the floor, inhale various kinds of dust, and intake more dust via the oral-digestive route as they put many toys in their mouths. In addition, nutritional deficiencies can easily occur during infancy. Lead absorption may increase under nutritionally unbalanced conditions than in nutrient-rich conditions.

Moreover, one study found that lead accumulated in the mother's bones moves more into the blood during pregnancy, increasing blood lead concentrations in infants. Numerous other studies have reported that the lead in the mother's blood passes through the placenta to the fetus. So, it is needed that pregnant women regularly monitor their blood lead levels to take appropriate precautions.