

URINE ELEMENTS

Dried Urine

Iodine, bromine, selenium and arsenic are potent halide, mineral and metal elements that have the potential to contribute to complex health conditions. Halides like iodine and bromine are halogen atoms bearing a negative charge. Other halides like fluoride (F^-), chloride (Cl^-), bromide (Br^-) and iodide (I^-) can compete with Iodine which affects thyroid function.

Bromine

Bromine, naturally in the earth's crust and in seawater is used in flame retardants, baking ingredients, cell phones, plastic, dyes, soft drinks, and prescription drugs. The Center for Disease Control have reported on potential dangers of bromine poisoning predominantly kidney or brain damage from low blood pressure. Lower doses of bromine can irritate skin, mucous membranes and tissues.

SIGNS AND SYMPTOMS ASSOCIATED WITH BROMINE TOXICITY

Increased risk of preterm birth and birth defects
Slowed neural and cognitive development
Fatigue, headache, memory problems
Psychosis, Schizophrenia
Skin disorders – irritation, burn, 'bromine acne', pus-filled eruptions and lesions
Kidney toxicity
Hearing loss

Iodine

Iodine is an essential component in thyroid hormone production. Iodine deficiency is re-emerging in many locations around the world. Since this essential mineral is required for the synthesis of thyroid hormones, the major indication of an iodine deficiency include hypothyroid symptoms. Furthermore, an iodine deficiency during pregnancy can result in cretinism, lowered intellectual quotients (IQ), mental retardation, autism, increased infant mortality, growth stunting and impaired movement. Iodine may also play a role in the maintenance of healthy breast tissue and cancer prevention. Its antioxidant, immune regulating and estrogen modulating functions may be mechanisms by which these properties can be explained. Its antioxidant, immune regulating and estrogen modulating functions may be mechanisms by which these properties can be explained.

SYMPTOMS AND CONDITIONS ASSOCIATED WITH AN IODINE DEFICIENCY

Hypothyroidism	Decreased fertility
Goitre	Prostate, endometrial, ovarian and breast cancers
Fibrocystic breast disease	Cardiovascular disease
Estrogen imbalance	Cretinism
Fatigue	Lowered intellectual quotients (IQ)
Depression	Increased perinatal death and infant mortality
Dry skin	Stunted growth
Weight gain	Impaired movement
Myalgia	Speech and hearing problems

Selenium

Selenium is a trace mineral naturally found in the soil, foods and water.

Selenium is necessary in the body as an antioxidant, to defend against free radical damage and inflammation, increase immunity and maintaining a healthy metabolism. It is also be shown to have positive antiviral effects and essential for successful fertility, and autoimmune thyroid diseases.

Arsenic

Heavy metals such as mercury, lead and arsenic may be harmful to the body. Arsenic found in foods and soil is generally harmless. Seafood has the highest concentration of arsenic in the form of arsenobetaine, an organic innocuous chemical. Rice fields have been known to contain arsenic exposure due to pesticide use and has a greater capacity to assimilate arsenic compared to other crops.

URINE ELEMENTS DRIED URINE [Test code: 1509]

❖ Iodine, Bromine, Selenium, Arsenic

Other element tests available

- **Hair Mineral Analysis - Level 1 or 2:** B, Ca, Co, Cr, Cu, Fe, Ge, I, Li, Mg, Mn, Mo, Se, Sr, V, W, Zn; Al, Sb, As, Ba, Be, Bi, Cd, Hg, Ni, Pb, Pd, Pt, Ag, Tl, Sn, Ti, U, Zr
- **Essential Mineral Analysis (urine) [5019]:** B, Ca, Co, Cr, Cu, Fe, Li, Mg, Mn, Mo, Se, Sr, V, Zn
- **Heavy Metal Analysis (urine) [5020]:** Al, As, Ba, Be, Bi, Cd, Hg, Ni, Pb, Pt, Sb, Sn, Tl
- **Red Cell or Whole Blood Minerals [5027]:** Co, Cr, Cu, I, Mg, Mn, Mo, Se, V, Zn
- **Drinking Water Minerals & Metals [5036]:** Cr, Cu, Fe, Mn, Se, Zn, Ca, Mg, B, Sr; Al, Sb, As, Ba, Be, Cd, Hg, Ni, Pb, Ag, Tl, U
- **Thyroid Hormone Profile - Extensive (spot or 24 hour urine):** T4, T3, T4/T3 ratios, Tyrosine, Iodine, Se
- **Iodine - Random (urine) [5016]:** Iodine (random)
- **Iodine - Loading (urine) [5015]:** Iodine (random), Iodine (post loading), Iodine excretion %

How to order a test kit:

To order a test kit simply request the test name and/or test code on a NutriPATH request form test code and have the patient phone **NutriPATH Customer Service on 1300 688 522.**

