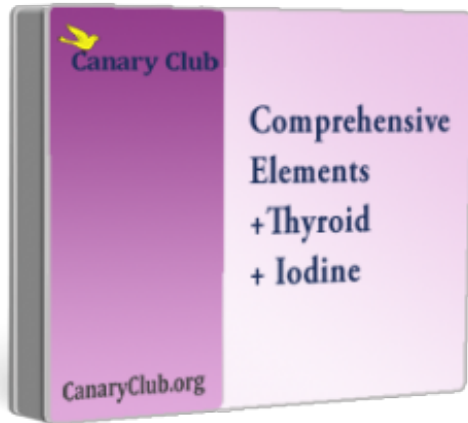

ZRT Comprehensive Elements + Thyroid + Iodine



Price: \$289.00

Short Description

Thyroid testing plus Elements testing. Allows your practitioner to see if you have too little or too much iodine and other nutrients essential for thyroid health. Also tests for overexposure to mercury, bromine, lithium, arsenic and cadmium- any of which can affect the thyroid.

Description

Thyroid function can be affected by many factors, including nutritional deficiencies and environmental exposure to certain elements. This profile is designed to help evaluate elemental exposure and thyroid hormone synthesis and the root problems of thyroid disorders and other health issues.

This testing allows practitioner screening for hypo- or hyperthyroidism, autoimmune thyroid disease, and monitoring thyroid replacement dosages. Elements testing allows practitioners to see if an individual has too little or too much of the essential nutrients iodine, bromine, lithium and selenium, or overexposure to arsenic and mercury- all of which can affect the thyroid gland.

These elements directly or indirectly impact thyroid hormone synthesis and intracellular conversion of T4 to T3. While arsenic, mercury, and cadmium are known biological toxins, iodine, bromine, lithium and selenium can potentially be toxic also if dietary intake, including excessive supplementation, is too high. Testing for these elements in urine provides an excellent assessment of overall body burden of toxic elements and is an

indicator of excessive or inadequate intake or supplementation, especially that of iodine and selenium.

Testing Iodine

Testing iodine levels, and treatment for both excessivity or deficiency, is emerging area of science that holds potential for improving your health and longevity.

Testing iodine, along with the blood spot tests in this profile, allows the tester to appreciate fully the impact of iodine on thyroid health. This is why:

There will always be limitations to detecting iodine over 24 hr or multiple single point tests (as provided by ZRT) because iodine levels can change somewhat from day to day depending on diet. Overall, if diet remains about the same, levels shouldn't fluctuate too much. With this caveat, ZRT went one step beyond iodine and developed dried blood spot tests that look at how well iodine is incorporated into the thyroid gland and how it is utilized for thyroid hormone synthesis. ZRT developed thyroid tests in dried blood spot that measure the following analytes associated with iodine: thyroglobulin, total T4, free T4, free T3, TSH, and TPO. Each of these analytes are uniquely associated with iodine.

Thyroglobulin is well recognized as a marker of iodine nutritional status over the past weeks. When iodine levels are low thyroglobulin is poorly iodinated and it spills out of the thyroid follicular lumen into the bloodstream. High levels indicate low iodine status. Iodine supplementation to sufficiency usually returns thyroglobulin to normal levels of less than 10 ng/ml in blood.

When iodine levels are very low, or very high from excessive supplementation (e.g. Iodoral in excess), thyroid hormone synthesis is inhibited and the amount of Total T4 released from the thyroid gland into the bloodstream decreases. Low T4 signals the brain to make more TSH to activate the thyroid gland to make more thyroid hormones, therefore an elevated TSH can be due to iodine levels too low or too high.

Free T4 and free T3 are not as directly related to iodine status, but provide some information about the bioavailable levels of these hormones to systemic tissues throughout the body.

TPO antibodies are important because those individuals positive (Hashimoto's thyroiditis) for this condition have a compromised thyroid gland that may react adversely to iodine supplementation, causing a person to go from mild subclinical hypothyroid state to one of clinical hypothyroidism that requires thyroid medication.

This Comprehensive Elements + Thyroid + Iodine test includes:

Elements: Iodine, Bromine, Cadmium, Selenium, Lithium, Arsenic, Creatinine and

Mercury. Tested in dried urine.

Thyroid: TSH, fT3, fT4, TPO, Total T4, Thyroglobulin. Tested in blood spot.

Test Includes

Lab	
ZRT	Yes
Elements	
Arsenic	Yes
Bromine	Yes
Cadmium	Yes
Creatinine	Yes
Iodine	Yes
Lithium	Yes
Mercury	Yes
Selenium	Yes
Thyroid	
fT3	Yes
fT4	Yes
Thyroglobulin	Yes
Total T4	Yes
TPO	Yes
TSH	Yes
Sample Type	
Blood Spot	Yes
Dried Urine	Yes