

# Urine Iodide (Pre & Post)



LAB#: U000000-0000-0  
 PATIENT: Sample Patient  
 ID: PATIENT-S-0001  
 SEX: Female  
 AGE: 68

CLIENT#: 12345  
 DOCTOR:  
 Doctor's Data, Inc.  
 3755 Illinois Ave.  
 St. Charles, IL 60174

~ 50 mg mixed  
 Iodine/Iodide  
 loading dose taken  
 between sample  
 1 & 2.

The baseline level of Iodine being excreted 'Day-to-Day' before Iodine loading. (Ensure at least these background levels are within range first)

## Urine Iodine; Pre & Post Loading

Iodine	µg/mg cr	mg/24 hr	Reference Range
Sample 1 PRE	0.44		0.1- 0.45 µg/mg cr
Sample 2 POST	32	22	0.1- 0.45 mg/24 hr
% Excretion/24 hr		44%	n/a

Iodine levels include iodine and iodide oxidized to iodine. **Excretion percentage** is calculated by dividing the patient's mg/24hour Iodine result by the Iodine/Iodide dosage (in mg) recorded on the requisition form, then multiplying by 100.

Ignore this (there is no reference range for individual levels)

The amount of loading Iodine dose retrieved over 24 hours metabolism (indicates the un-utilised portion excreted by the body)

The overall percentage of the original loading dose that was excreted. This is currently the best assessment of Iodine sufficiency.

(Target being at least over 80% excretion, which would indicate the body's 'satisfaction' with its Iodine status, that it is prepared to excrete the majority of the loading dose)

\*Follow responsible, medically advised supplement regimes to address any deficiencies found. (Some excessively extreme dosing guidelines exist).

\* Also Consider the 'Iodine obstructing role' of the toxic 'Halides'.

This test was performed using ICP-MS to estimate the dietary intake, and total body sufficiency of the essential element iodide/iodine. Specific tissues in the body utilize iodine and iodide. Iodide, the reduced form of iodine, is highly concentrated in the thyroid gland where it is incorporated into thyroid hormones. Adequate iodide status is essential for the production of normal levels of thyroid hormones and the integrity of the thyroid and mammary glands. Thyroid hormones regulate growth and metabolic rate, body heat and energy production, and neuronal and sexual development. Iodine is concentrated in the breasts where it is associated with protection against fibrocystic breast disease and cancer. Iodine deficiency has been associated with impaired mental function, loss of energy due to hypothyroidism and increased incidence of thyroid and breast cancer.

Iodide/iodine status is greatly influenced by dietary intake, but also by exposure to goitrogens that inhibit the absorption and binding of iodine. Goitrogenic substances include chlorine (tap water, pools/hot tubs, cleaning products), fluoride (water, toothpaste, mouth wash, some medications) and bromide (pools/hot tubs, baked goods, soft drinks, pesticides, medications).

The percentage excretion stated above provides an evaluation of total body sufficiency of iodide/iodine. The premise is the lower the percentage that was excreted, the more the body has retained. Appropriate levels of total body I retention will be dependent upon the entire clinical presentation, and the attending practitioner will advise as to the significance of the reported results.

Creatinine	Result	Reference Range
Sample 1 PRE	57	35- 225 mg/dL
Sample 2 POST	680	600- 1900 mg/24hr

**Urine Creatinine** is used to account for urinary dilution effects in less than 24-hour collections and to assess the collection completeness in 24-hour collections. For estimation of glomerular filtration rate (GFR), a Creatinine Clearance test is recommended.

This attempts to detect any incomplete 24 hour sample collections (or severe kidney pathology) that might obscure results.

### Comments:

#1 Date Collected: 11/8/2006 #2 Date Collected: 11/9/2006 Date Received: 11/10/2006  
 #1 Collection Period: Random #2 Collection Period: 24 hr coll Date Completed: 11/11/2006  
 #2 Volume: 2000 ml <dl: less than detection limit  
 #2 Loading Dosage: 50 MG Method: ICP-MS/Creatinine: Jaffe method

Reference ranges are representative of a healthy population under non-challenge or non-loading conditions.

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