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Calgary, AB T3L 2P5
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Collection Completion Date: 2006/11/8
Sample Received: 2006/11/9
Reported On: 2006/12/12

URINARY THYROID ASSESSMENT

Accession Number: 22029

Provider:

Dr. Jane Doe
333 Snow Street
Whitehorse, YT Y1A 1E3

Client:

I. M. Friesen
321 Any Street
Whitehorse, YK Y1A 1E1

Age:

45

DOB:

1960/1/1

Gender:

Female

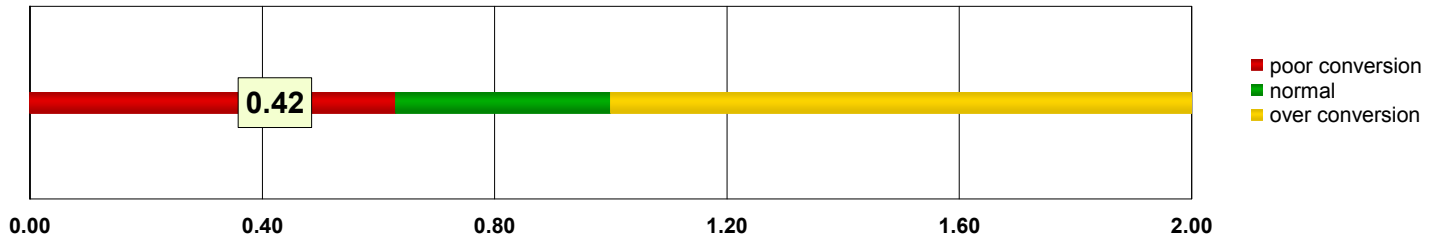
Phone:

Fax:

Health #:

N/A

TestType	Status	Result	Range	Units
Selenium	Within range	80	22 - 240	ug/24hr
T3	Below range	716	800 - 1,800	pmol/24hr
T4	Below range	1,698	1,800 - 3,000	pmol/24hr
Urine Volume	Within range	1,675	600 - 2,500	ml
T3/T4 Ratio	Below range	0.42	0.63 - 1.00	ml



Sample analyzed at Vitamin Diagnostics Laboratory, Cliffwood Beach, NJ


George Gillson MD, PhD
Medical Director





13C Glucose Breath Test for Insulin Resistance

Accession Number: 11365

Provider:
 Any Who, MD
 222 test NW
 Calgary AB T2P 2P3

Client:
 Minnie Test

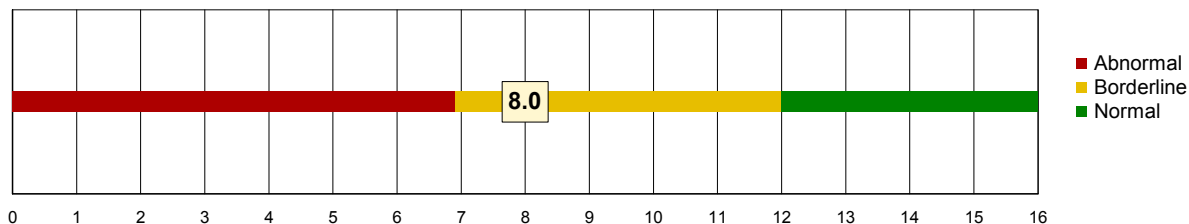
Age: 38
DOB: 1967/8/23
Gender: Female
Status: Hysterectomy

Phone: 4035555555
 Fax:

Health #: 123456789-0

Test	Status	Result	Units
Diatest	Borderline	8.0	% increase over baseline

13C Glucose Breath Test
 Diatest



13CO2 Glucose Breath Test Information

Insulin is a polypeptide hormone secreted by the beta cells of the pancreas. One of the major functions of insulin is to stimulate glucose uptake into tissues for utilization. Transport of glucose into tissue keeps blood glucose levels within a specific range of 'normal' values. With insulin resistance, tissues become resistant to the effects of insulin, which means the pancreas must produce more insulin to maintain normal blood glucose levels. Over time, the pancreas no longer produces sufficient amounts of insulin, which results in high blood glucose levels and a probable diagnosis of type II diabetes. [1]

Various prospective studies have demonstrated that insulin resistance is an excellent predictor of whether a person will go on to develop diabetes. In fact, insulin resistance is commonly referred to as pre-diabetes because it so often precedes the development of type II diabetes. [1] Insulin resistance has also been linked to heart disease, polycystic ovarian syndrome, hypertension, sleep apnea, breast cancer and obesity. [2]

Insulin stimulates glucose uptake into tissues, where it is metabolized to carbon dioxide (CO2) and water. The 13C glucose breath test measures expired 13CO2 before and after ingestion of stable 13C universally labeled glucose (non-radioactive). Patients with normal insulin function exhale a greater percentage of 13CO2 because the 13C labeled glucose has been adequately delivered to tissue through the actions of insulin. Insulin resistant patients exhale less 13CO2 because resistance to the effects of insulin reduces the transport of glucose into tissues, and therefore less 13CO2 is produced. [3]


 George Gillson MD, PhD
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