Thyrocare

Tests you can trust

Name : XXXXXXXXXXXXXXXX

Date : XXXXXXXX

Test Asked : Metabolic Profile - Advanced New

Report Status: XXXXXXXXXX



First National Diagnostic Chain to have **100% of its Labs with NABL Accreditation#**

98% Reports released within 06 Hours of sample reaching the lab+

9 out of 10 Doctors Trust that Thyrocare reports are Accurate & Reliable*

1200+ Tests & Profiles

Temperature-Controlled Sample Logistics

Unique Barcode Tracking

Fully Automated Machines Inspected Daily

Abnormal Values Re-Checked Twice

Reports Verified By Expert MD Pathologists Stationed at Every Lab

Your reports are digitally verifiable

Scan the QR code inside the report to check authenticity of reported values

QR code will remain active for 30 days from report release date

Accredited by

NABL From 2005#

ISO 9001: 2015 - From 2015

CAP From 2007~

Dummy Report

Processed At :

Thyrocare
Tests you can trust

Thyrocare Technologies Limited, D-37/3, TTC MIDC, Turbhe, Navi Mumbai - 400 703. 9870666333 wellness@thyrocare.com

First National Diagnostic Chain to have 100% of its Labs with NABL Accreditation#

Patient Name : **XXXXXXXXXXXXXXXX**
Referred By : **XXXXXXXXXXXXXXXX**
Sample Collected At : **XXXXXXXXXXXXXXXX**

Tests Done : **METABOLIC PROFILE - ADVANCED NEW**

Report Availability Summary

Note: Please refer to the table below for status of your tests.

19 Ready | **0** Ready with Cancellation | **0** Processing | **0** Cancelled in Lab

TEST DETAILS	REPORT STATUS
METABOLIC PROFILE - ADVANCED NEW	Ready
CHLORIDE	Ready
MAGNESIUM	Ready
PHOSPHOROUS	Ready
SERUM COPPER	Ready
SERUM ZINC	Ready
SODIUM	Ready
VITAMIN A	Ready
VITAMIN E	Ready
VITAMIN K	Ready
HBA PROFILE	Ready
HEMOGRAM - 6 PART (DIFF)	Ready
LIVER FUNCTION TESTS	Ready
ELEMENTS 22 (TOXIC AND NUTRIENTS)	Ready
IRON DEFICIENCY PROFILE	Ready
KIDPRO	Ready
LIPID PROFILE	Ready
VITAMIN D PROFILE	Ready
VITAMIN B COMPLEX PROFILE	Ready
T3-T4-USTSH	Ready

Dummy Report

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Patient Name : **XXXXXXXXXXXXXXXX**
Referred By : **XXXXXXXXXXXXXXXX**
Sample Collected At : **XXXXXXXXXXXXXXXX**

Tests Done : **METABOLIC PROFILE - ADVANCED NEW**

Tests Outside Reference Range

Note: Please refer to the table below for tests outside reference range.

Test Name	Observed Value	Units	Bio. Ref. Interval.
ARTHRITIS			
PHOSPHOROUS	**9.58**	mg/dL	2.4 - 5.1
COMPLETE HEMOGRAM			
EOSINOPHILS	**7.7**	%	1-6
HEMOGLOBIN	**11.4**	g/dL	12.0-15.0
MEAN CORP.HEMO.CONC(MCHC)	**28.8**	g/dL	31.5-34.5
MEAN CORPUSCULAR VOLUME(MCV)	**104.8**	fL	83.0-101.0
MONOCYTES	**1.7**	%	2-10
MONOCYTES - ABSOLUTE COUNT	**0.1**	X 10^3 / µL	0.2 - 1.0
RED CELL DISTRIBUTION WIDTH (RDW-CV)	**16.3**	%	11.6-14.0
RED CELL DISTRIBUTION WIDTH - SD(RDW-SD)	**63.5**	fL	39.0-46.0
TOTAL RBC	**3.78**	X 10^6/µL	3.8-4.8
LIVER			
ALANINE TRANSAMINASE (SGPT)	**39.5**	U/L	< 34
ALKALINE PHOSPHATASE	**138.5**	U/L	45-129
ASPARTATE AMINOTRANSFERASE (SGOT)	**40.2**	U/L	< 31
SERUM GLOBULIN	**3.95**	gm/dL	2.5-3.4
VITAMIN			
VITAMIN B-12	**119**	pg/mL	197-771
VITAMIN D TOTAL	**6.56**	ng/mL	30-100

Dummy Report

Disclaimer: The above listed is the summary of the parameters with values outside the BRI. For detailed report values, parameter correlation and clinical interpretation, kindly refer to the same in subsequent pages.

Patient Name : **XXXXXXXXXXXXXXXX**
Referred By : **XXXXXXXXXXXXXXXX**
Sample Collected At : **XXXXXXXXXXXXXXXX**

Sample Collected on (SCT) : **XXXXXXXXXXXXXXXX**
Sample Received on (SRT) : **XXXXXXXXXXXXXXXX**
Report Released on (RRT) : **XXXXXXXXXXXXXXXX**
Sample Type | Barcode : **XXXXXXXXXXXXXXXX**

TEST NAME	TECHNOLOGY	VALUE	UNITS
VITAMIN A	LC-MS/MS	330.5	ng/mL

Bio. Ref. Interval. :-

Age	Reference range
1 - 6 Years	200 - 400
7 - 12 Years	260 - 490
13 - 19 Years	260 - 720
Above 18 Years	300 - 800

Clinical Significance:

Vitamin A or Retinol plays important role in the function retinal vision, growth, reproduction, embryonic development as well as in immune function. Vitamin A is also required for adaptive immunity and plays a role in the development of both T- helper cells and B-cells. Retinol and its metabolites and synthetic retinoids provide protective effects against the development of certain types of cancer by blocking tumor promotion, by inhibiting proliferation, by inducing apoptosis, by inducing differentiation or by performing combination of these actions.

Fat malabsorption, particularly caused by celiac disease or chronic pancreatitis and protein -energy malnutrition predispose to vitamin A deficiency. Clinical features of vitamin A deficiency include degenerative changes in eyes and skin and poor dark adaptation or night blindness. Vitamin A deficiency impairs innate immunity by impeding normal regeneration of mucosal bariers damaged by infection and by diminishing the function of neutrophils, macrophages and natural killer cells.

Toxic effects of hypervitaminosis A have occurred as a result of ingestion of excess vitamin or as a side effect of inappropriate therapy. Symptoms of acute toxicity from single massive dose present as abdominal pain, nausea,, vomiting, severe headache, dizziness, sluggishness and irritability. Chronic toxicity shows symptoms like bone, join pain, hair loss, dryness and fissures of the lips, anorexia, benign intracranial hypertension, weight loss an hepatomegaly.

Clinical reference:

Tietz Textbok of clinical chemistry and Molecular diagnostic, Carl A. Burtis, Edward R. Ashwood, David E. Bruns, Fifth edition., Elsevier.

Please correlate with clinical conditions.
Method:- LIQUID CHROMATOGRAPHY TANDEM MASS SPECTROMETRY

Tests Done : **METABOLIC PROFILE - ADVANCED NEW**

Doctor 1 Sign **Doctor 2 Sign**

Dummy Report

Patient Name : **XXXXXXXXXXXXXXXX**
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Sample Type | Barcode : **XXXXXXXXXXXXXXXX**

TEST NAME	TECHNOLOGY	VALUE	UNITS
VITAMIN E	LC-MS/MS	7038.81	ng/mL

Bio. Ref. Interval. :-

Age	
< 1 Month	1000 - 3500
2 - 5 Months	2000 - 6000
6 M - 1 year	3500 - 8000
2 - 12 years	5500 - 9000
Above 13 years	5500 - 18000

Clinical Significance: Vitamin E or Alpha-tocopherol (body's main form of vitamin) function as antioxidant which protects vitamin A, C and red blood cells from oxidative damage caused by free radicals. It has been recognized as necessary for neurologic and reproductive functions, for prevention of retinopathy in premature infants. Alpha-tocopherol also induces inhibition of cell proliferation, platelete aggregation, and monocyte adhesion, which are thought to be the results of direct interaction of alpha-tocopherol with cell components. Alpha-tocopherol reduces inflammatory mediator production.

Premature and low birth weight infants are particularly susceptible to development of vitamin E deficiency, because placental transfer is poor and infants have such limited adipose tissue where much of the vitamins is normally stored. Signs of deficiency include irritability, edema and hemolytic anemia. Although symptoms of vitamin E deficiency are rare in children and adults, deficiency can occur in some conditions.

Excess vitamin E intake usually is achieved only by dietary supplementation. A comprehensive review of tolerance and safety of vitamin E suggested that intakes upto 3000mg/d were safe and reversible side effects of gastrointestinal symptoms, increased creatinuria, and impairment of blood coagulation are seen at intakes of 1000-3000 mg/d. However as noted earlier, long term use of intakes greater than 400mg/d may cause increased mortality.

Clinical reference: Tietz Textbok of clinical chemistry and Molecular diagnostic, Carl A. Burtis, Edward R. Ashwood, David E. Bruns, Fifth edition., Elsevier.

Please correlate with clinical conditions.

Method:- LIQUID CHROMATOGRAPHY TANDEM MASS SPECTROMETRY

Tests Done : **METABOLIC PROFILE - ADVANCED NEW**

Doctor 1 Sign **Doctor 2 Sign**

Dummy Report

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Report Released on (RRT) : **XXXXXXXXXXXXXXXX**
Sample Type | Barcode : **XXXXXXXXXXXXXXXX**

TEST NAME	TECHNOLOGY	VALUE	UNITS
VITAMIN K	LC-MS/MS	0.57	ng/mL

Bio. Ref. Interval. :-

0.13 - 1.19

Clinical significance:

Vitamin K assay measures the principal form of vitamin K i.e. K1 :Phylloquinone which found predominantly in green leafy vegetables, margarines and plant oils.

Vitamin K promotes clotting of the blood, is required for the conversion of several clotting factors and prothombin, and is of growing interest in bone metabolism. Vitamin K plays important role in the deposition of ionic calcium needed for proper blood coagulation and bone formation.

Although vitamin K deficiency in the adults is uncommon, the risk is increased for fat malabsorption states such as bile duct obstruction,cystic fibrosis, chronic pancreatitis and liver disease. Risk also increased by the use of drugs that interfere with vitamin K metabolism, such as warfarin, cepahlosporin. Defective blood coagulation and demonstration of abnormal noncarboxylated prothrombin are at present the only well-established signs of vitamin K deficiency.

The use of high doses of naturally occurring vitamin K (K1 and K2) appears to have no untoward effect; however menadione(K3) treatment can lead to formation of erythrocyte cytoplasmic inclusions known as Heinz bodies and hemolytic anemia. With severe hemolysis, increase bilirubin formation and undeveloped capacity for its conjugation may produce kernicterus in the newborn.

Clinical reference:

Tietz Textbok of clinical chemistry and Molecular diagnostic, Carl A. Burtis, Edward R. Ashwood, David E. Bruns, Fifth edition., Elsevier.

Please correlate with clinical conditions.

Method:- LIQUID CHROMATOGRAPHY TANDEM MASS SPECTROMETRY

Dummy Report

Tests Done : **METABOLIC PROFILE - ADVANCED NEW**

Doctor 1 Sign **Doctor 2 Sign**

Patient Name : **XXXXXXXXXXXXXXXX**
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Sample Received on (SRT) : **XXXXXXXXXXXXXXXX**
Report Released on (RRT) : **XXXXXXXXXXXXXXXX**
Sample Type | Barcode : **XXXXXXXXXXXXXXXX**

TEST NAME	TECHNOLOGY	VALUE	UNITS	Bio. Ref. Interval.
VITAMIN B1/THIAMIN	LC-MS/MS	1.47	ng/mL	0.5-4.0
VITAMIN B2/RIBOFLAVIN	LC-MS/MS	20.73	ng/mL	1.6-68.2
VITAMIN B3/NICOTINIC ACID	LC-MS/MS	0.69	ng/mL	< 5
VITAMIN B5/PANTOTHENIC	LC-MS/MS	105.59	ng/mL	11-150
VITAMIN B6/P5P	LC-MS/MS	5.08	ng/mL	5 - 50
VITAMIN B7/BIOTIN	LC-MS/MS	1.34	ng/mL	0.2-3
VITAMIN B9/FOLIC ACID	LC-MS/MS	0.53	ng/mL	0.2-20
VITAMIN B-12	**E.C.L.I.A**	**119**	**pg/mL**	**197-771**

Please correlate with clinical conditions.

Method :

VITB1 - LIQUID CHROMATOGRAPHY TANDEM MASS SPECTROMETRY
VITB2 - LIQUID CHROMATOGRAPHY TANDEM MASS SPECTROMETRY
VITB3 - LIQUID CHROMATOGRAPHY TANDEM MASS SPECTROMETRY
VITB5 - LIQUID CHROMATOGRAPHY TANDEM MASS SPECTROMETRY
VITB6 - LIQUID CHROMATOGRAPHY TANDEM MASS SPECTROMETRY
VITB7 - LIQUID CHROMATOGRAPHY TANDEM MASS SPECTROMETRY
VITB9 - LIQUID CHROMATOGRAPHY TANDEM MASS SPECTROMETRY
VITB - Fully Automated Electrochemiluminescence Compititive Immunoassay

Dummy Report

Tests Done : **METABOLIC PROFILE - ADVANCED NEW**

Doctor 1 Sign **Doctor 2 Sign**

Patient Name : XXXXXXXXXXXXXXXX
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Sample Collected At : XXXXXXXXXXXXXXXX

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Sample Received on (SRT) : XXXXXXXXXXXXXXXX
Report Released on (RRT) : XXXXXXXXXXXXXXXX
Sample Type | Barcode : XXXXXXXXXXXXXXXX

TEST NAME	TECHNOLOGY	VALUE	UNITS
SERUM COPPER	PHOTOMETRY	147.47	µg/dL

Bio. Ref. Interval. :-

Male : 63.5 - 150
Female : 80 - 155

Clinical significance:
Copper is an important trace element and a component of numerous enzymes and proteins involved in energy production, connective tissue formation, melanin synthesis, iron metabolism, development of central nervous system, angiogenesis as well as an antioxidant. Deficiency can cause- Malnourishment, cardiovascular disease, anemia & neuropathy, toxicity may be manifested as acute renal failure, gastroenteritis & chronic liver disease.

Specifications:
Precision: Intra assay (%CV): 1.17, Inter assay (%CV): 2.32.

Kit validation references:
Thomas L. Clinical Laboratory Diagnostics. 1st ed. Frankfurt: TH-Books Verlagsgesellschaft; 1998. p. 337-8

Please correlate with clinical conditions.
Method:- 3,5-DIBR-PAESA

Dummy Report

Tests Done : **METABOLIC PROFILE - ADVANCED NEW**

Doctor 1 Sign **Doctor 2 Sign**

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Sample Type | Barcode : **XXXXXXXXXXXXXXXX**

TEST NAME	TECHNOLOGY	VALUE	UNITS
SERUM ZINC	PHOTOMETRY	70.84	µg/dL

Bio. Ref. Interval. :-

52 - 286

Clinical Significance:
Zinc is one of the essential trace elements in the body. Its metalloenzymes play a key role in protein and nucleic acid synthesis, gene expression, wound healing, as an antioxidant, etc. Deficiency can cause- Poor wound healing, gastroenteritis, impaired spermatogenesis, Alzheimer's disease, etc. Toxicity may be manifested as pancreatitis, gastric ulcer, anemia, pulmonary fibrosis.

Specifications:
Precision: Intra assay (%CV): 2.02, Inter assay (%CV): 2.22.

Kit Validation References:
Thomas L. Clinical Laboratory Diagnostics. 1st ed. Frankfurt: TH-Books Verlagsgesellschaft; 1998. p. 347-9

Please correlate with clinical conditions.
Method:- NITRO - PAPS

Dummy Report

Tests Done : **METABOLIC PROFILE - ADVANCED NEW**

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Sample Collected on (SCT) : **XXXXXXXXXXXXXXXX**
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Report Released on (RRT) : **XXXXXXXXXXXXXXXX**
Sample Type | Barcode : **XXXXXXXXXXXXXXXX**

TEST NAME	TECHNOLOGY	VALUE	UNITS
IRON	PHOTOMETRY	61.3	µg/dL
Bio. Ref. Interval. : Male : 65 - 175 Female : 50 - 170 **Method :** Ferrozine method without deproteinization			
TOTAL IRON BINDING CAPACITY (TIBC)	PHOTOMETRY	299.7	µg/dL
Bio. Ref. Interval. : Male: 225 - 535 µg/dl Female: 215 - 535 µg/dl **Method :** Spectrophotometric Assay			
% TRANSFERRIN SATURATION	CALCULATED	20.45	%
Bio. Ref. Interval. : 13 - 45 **Method :** Derived from IRON and TIBC values			
UNSAT.IRON-BINDING CAPACITY(UIBC)	PHOTOMETRY	238.4	µg/dL
Bio. Ref. Interval. : 162 - 368 **Method :** SPECTROPHOTOMETRIC ASSAY			

Please correlate with clinical conditions.

Dummy Report

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Sample Received on (SRT) : **XXXXXXXXXXXXXXXX**
Report Released on (RRT) : **XXXXXXXXXXXXXXXX**
Sample Type | Barcode : **XXXXXXXXXXXXXXXX**

TEST NAME	TECHNOLOGY	VALUE	UNITS	Bio. Ref. Interval.
TOTAL CHOLESTEROL	PHOTOMETRY	132	mg/dL	< 200
HDL CHOLESTEROL - DIRECT	PHOTOMETRY	44	mg/dL	40-60
HDL / LDL RATIO	CALCULATED	0.48	Ratio	> 0.40
LDL CHOLESTEROL - DIRECT	PHOTOMETRY	91	mg/dL	< 100
TRIG / HDL RATIO	CALCULATED	1.98	Ratio	< 3.12
TRIGLYCERIDES	PHOTOMETRY	87	mg/dL	< 150
NON-HDL CHOLESTEROL	CALCULATED	88	mg/dL	< 160
TC/ HDL CHOLESTEROL RATIO	CALCULATED	3	Ratio	3 - 5
LDL / HDL RATIO	CALCULATED	2.1	Ratio	1.5-3.5
VLDL CHOLESTEROL	CALCULATED	17.48	mg/dL	5 - 40

Please correlate with clinical conditions.

Method :

CHOL - Cholesterol Oxidase, Esterase, Peroxidase
HCHO - Direct Enzymatic Colorimetric
HD/LD - Derived from HDL and LDL values.
LDL - Direct Measure
TRI/H - Derived from TRIG and HDL Values
TRIG - Enzymatic, End Point
NHDL - Derived from serum Cholesterol and HDL values
TC/H - Derived from serum Cholesterol and Hdl values
LDL/ - Derived from serum HDL and LDL Values
VLDL - Derived from serum Triglyceride values

***REFERENCE RANGES AS PER NCEP ATP III GUIDELINES:**

TOTAL CHOLESTEROL	(mg/dl)	HDL	(mg/dl)	LDL	(mg/dl)	TRIGLYCERIDES	(mg/dl)
DESIRABLE	<200	LOW	<40	OPTIMAL	<100	NORMAL	<150
BORDERLINE HIGH	200-239	HIGH	>60	NEAR OPTIMAL	100-129	BORDERLINE HIGH	150-199
HIGH	>240			BORDERLINE HIGH	130-159	HIGH	200-499
				HIGH	160-189	VERY HIGH	>500
				VERY HIGH	>190		

Alert !!! 10-12 hours fasting is mandatory for lipid parameters. If not, values might fluctuate.

Dummy Report

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Sample Type | Barcode : **XXXXXXXXXXXXXXXX**

TEST NAME	TECHNOLOGY	VALUE	UNITS	Bio. Ref. Interval.
ALKALINE PHOSPHATASE	**PHOTOMETRY**	**138.5**	**U/L**	**45-129**
BILIRUBIN - TOTAL	PHOTOMETRY	0.34	mg/dL	0.3-1.2
BILIRUBIN -DIRECT	PHOTOMETRY	0.07	mg/dL	< 0.3
BILIRUBIN (INDIRECT)	CALCULATED	0.27	mg/dL	0-0.9
GAMMA GLUTAMYL TRANSFERASE (GGT)	PHOTOMETRY	16.6	U/L	< 38
SGOT / SGPT RATIO	CALCULATED	1.02	Ratio	< 2
ASPARTATE AMINOTRANSFERASE (SGOT)	**PHOTOMETRY**	**40.2**	**U/L**	**< 31**
ALANINE TRANSAMINASE (SGPT)	**PHOTOMETRY**	**39.5**	**U/L**	**< 34**
PROTEIN - TOTAL	PHOTOMETRY	7.72	gm/dL	5.7-8.2
ALBUMIN - SERUM	PHOTOMETRY	3.77	gm/dL	3.2-4.8
SERUM GLOBULIN	**CALCULATED**	**3.95**	**gm/dL**	**2.5-3.4**
SERUM ALB/GLOBULIN RATIO	CALCULATED	0.95	Ratio	0.9 - 2

Please correlate with clinical conditions.

Method :

ALKP - Modified IFCC method
BILT - Vanadate Oxidation
BILD - Vanadate Oxidation
BILI - Derived from serum Total and Direct Bilirubin values
GGT - Modified IFCC method
OT/PT - Derived from SGOT and SGPT values.
SGOT - IFCC* Without Pyridoxal Phosphate Activation
SGPT - IFCC* Without Pyridoxal Phosphate Activation
PROT - Biuret Method
SALB - Albumin Bcg[1]method (Colorimetric Assay Endpoint)
SEGB - DERIVED FROM SERUM ALBUMIN AND PROTEIN VALUES
A/GR - Derived from serum Albumin and Protein values

Dummy Report

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Sample Collected on (SCT) : XXXXXXXXXXXXXXXX
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Report Released on (RRT) : XXXXXXXXXXXXXXXX
Sample Type | Barcode : XXXXXXXXXXXXXXXX

TEST NAME	TECHNOLOGY	VALUE	UNITS
MAGNESIUM	PHOTOMETRY	2.1	mg/dL

Bio. Ref. Interval. :-

1.90 - 3.10 mg/dL

Clinical significance:

Magnesium is the fourth most abundant cation in the body and second most prevalent intracellular cation. The total body magnesium content is about 25 g or approximately 1 mol, of which 55% reside in the skeleton. About 45% of the magnesium is intracellular. In general higher the metabolic activity of cell, the greater is its magnesium content. Magnesium is a cofactor for more than 300 enzymes in the body.

Disorders of magnesium metabolism are separated into those causing hypomagnesaemia/magnesium deficiencies and hypermagnesemia. Hypomagnesaemia is common in patient in hospitals. Moderate to severe deficiency of magnesium is usually due to loss of magnesium from the gastrointestinal (gi) tract or kidneys. One of the more serious complications of magnesium deficiency is cardiac arrhythmia. Symptomatic hypermagnsemia is almost always caused by excessive intake, resulting from administration of antacids, enemas, and parenteral fluids containing magnesium. Depression of neuromuscular system is the most common manifestation of magnesium intoxication.

External quality control program participation:

College Of American Pathologists: Chemistry survey; CAP Number: 7193855-01

Please correlate with clinical conditions.
Method:- MODIFIED XYLIDYL BLUE REACTION METHOD

Dummy Report

Tests Done : **METABOLIC PROFILE - ADVANCED NEW**

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Report Released on (RRT) : **XXXXXXXXXXXXXXXX**
Sample Type | Barcode : **XXXXXXXXXXXXXXXX**

TEST NAME	TECHNOLOGY	VALUE	UNITS	Bio. Ref. Interval.
CALCIUM	PHOTOMETRY	8.97	mg/dL	8.8-10.6
URIC ACID	PHOTOMETRY	4.53	mg/dL	3.2 - 6.1
BLOOD UREA NITROGEN (BUN)	PHOTOMETRY	8.44	mg/dL	7.94 - 20.07
UREA (CALCULATED)	CALCULATED	18.06	mg/dL	Adult : 17-43
CREATININE - SERUM	PHOTOMETRY	0.65	mg/dL	0.55-1.02
UREA / SR.CREATININE RATIO	CALCULATED	27.79	Ratio	< 52
BUN / SR.CREATININE RATIO	CALCULATED	12.98	Ratio	9:1-23:1
SODIUM	I.S.E - INDIRECT	143.1	mmol/L	136 - 145
CHLORIDE	I.S.E - INDIRECT	103.7	mmol/L	98 - 107
PHOSPHOROUS	**PHOTOMETRY**	**9.58**	**mg/dL**	**2.4 - 5.1**

Please correlate with clinical conditions.

Method :

CALC - Arsenazo III Method, End Point.
URIC - Uricase / Peroxidase Method
BUN - Kinetic UV Assay.
UREAC - Derived from BUN Value.
SCRE - Creatinine Enzymatic Method
UR/CR - Derived from UREA and Sr.Creatinine values.
B/CR - Derived from serum Bun and Creatinine values
SOD - ION SELECTIVE ELECTRODE - INDIRECT
CHL - ION SELECTIVE ELECTRODE - INDIRECT
PHOS - UNREDUCED PHOSPHOMOLYBDATE METHOD

Dummy Report

Tests Done : **METABOLIC PROFILE - ADVANCED NEW**

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Sample Type | Barcode : **XXXXXXXXXXXXXXXX**

TEST NAME	TECHNOLOGY	VALUE	UNITS	Bio. Ref. Interval.
TOTAL TRIIODOTHYRONINE (T3)	E.C.L.I.A	158	ng/dL	80-200
TOTAL THYROXINE (T4)	E.C.L.I.A	7.92	µg/dL	4.8-12.7
TSH - ULTRASENSITIVE	E.C.L.I.A	4.18	µIU/mL	0.54-5.30

Comments : ***

The Biological Reference Ranges is specific to the age group. Kindly correlate clinically.

Method :

T3,T4 - Fully Automated Electrochemiluminescence Compititive Immunoassay
USTSH - Fully Automated Electrochemiluminescence Sandwich Immunoassay

Pregnancy reference ranges for TSH/USTSH :
Trimester || T3 (ng/dl) || T4 (µg/dl) || TSH/USTSH (µIU/ml)
1st || 83.9-196.6 || 4.4-11.5 || 0.1-2.5
2nd || 86.1-217.4 || 4.9-12.2 || 0.2-3.0
3rd || 79.9-186 || 5.1-13.2 || 0.3-3.5

References :

1. Carol Devilia, C I Parhon. First Trimester Pregnancy ranges for Serum TSH and Thyroid Tumor reclassified as Benign. Acta Endocrinol. 2016; 12(2) : 242 - 243
2. Kulhari K, Negi R, Kalra DK et al. Establishing Trimester specific Reference ranges for thyroid hormones in Indian women with normal pregnancy : New light through old window. Indian Journal of Contemporary medical research. 2019; 6(4)

Disclaimer : Results should always be interpreted using the reference range provided by the laboratory that performed the test. Different laboratories do tests using different technologies, methods and using different reagents which may cause difference. In reference ranges and hence it is recommended to interpret result with assay specific reference ranges provided in the reports. To diagnose and monitor therapy doses, it is recommended to get tested every time at the same Laboratory.

Dummy Report

Tests Done : **METABOLIC PROFILE - ADVANCED NEW**

Doctor 1 Sign **Doctor 2 Sign**

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Sample Received on (SRT) : **XXXXXXXXXXXXXXXX**
Report Released on (RRT) : **XXXXXXXXXXXXXXXX**
Sample Type | Barcode : **XXXXXXXXXXXXXXXX**

TEST NAME	TECHNOLOGY	VALUE	UNITS
EST. GLOMERULAR FILTRATION RATE (eGFR)	CALCULATED	109	mL/min/1.73 m2

Bio. Ref. Interval. :-

> = 90 : Normal
60 - 89 : Mild Decrease
45 - 59 : Mild to Moderate Decrease
30 - 44 : Moderate to Severe Decrease
15 - 29 : Severe Decrease

Clinical Significance

The normal serum creatinine reference interval does not necessarily reflect a normal GFR for a patient. Because mild and moderate kidney injury is poorly inferred from serum creatinine alone. Thus, it is recommended for clinical laboratories to routinely estimate glomerular filtration rate (eGFR), a "gold standard" measurement for assessment of renal function, and report the value when serum creatinine is measured for patients 18 and older, when appropriate and feasible. It cannot be measured easily in clinical practice, instead, GFR is estimated from equations using serum creatinine, age, race and sex. This provides easy to interpret information for the doctor and patient on the degree of renal impairment since it approximately equates to the percentage of kidney function remaining. Application of CKD-EPI equation together with the other diagnostic tools in renal medicine will further improve the detection and management of patients with CKD.

Reference

Levey AS, Stevens LA, Schmid CH, Zhang YL, Castro AF, 3rd, Feldman HI, et al. A new equation to estimate glomerular filtration rate. Ann Intern Med. 2009;150(9):604-12.

Please correlate with clinical conditions.
Method:- 2021 CKD EPI Creatinine Equation

Dummy Report

Tests Done : **METABOLIC PROFILE - ADVANCED NEW**

Doctor 1 Sign **Doctor 2 Sign**

Patient Name : **XXXXXXXXXXXXXXXX**
Referred By : **XXXXXXXXXXXXXXXX**
Sample Collected At : **XXXXXXXXXXXXXXXX**

Sample Collected on (SCT) : **XXXXXXXXXXXXXXXX**
Sample Received on (SRT) : **XXXXXXXXXXXXXXXX**
Report Released on (RRT) : **XXXXXXXXXXXXXXXX**
Sample Type | Barcode : **XXXXXXXXXXXXXXXX**

TEST NAME	TECHNOLOGY	VALUE	UNITS
VITAMIN D2	LC-MS/MS	0.61	ng/mL

Method : LIQUID CHROMATOGRAPHY TANDEM MASS SPECTROMETRY

VITAMIN D3	LC-MS/MS	5.95	ng/mL

Method : LIQUID CHROMATOGRAPHY TANDEM MASS SPECTROMETRY

VITAMIN D TOTAL	**CALCULATED**	**6.56**	**ng/mL**

Bio. Ref. Interval. :
Deficiency : <20 ng/mL
Insufficiency : 20-30 ng/mL
Sufficiency : 30-100 ng/mL
Toxicity : >100 ng/mL

Method : Derived from VD2 and VD3 values

Please correlate with clinical conditions.

Dummy Report

Tests Done : **METABOLIC PROFILE - ADVANCED NEW**

Doctor 1 Sign **Doctor 2 Sign**

Patient Name : **XXXXXXXXXXXXXXXX**
Referred By : **XXXXXXXXXXXXXXXX**
Sample Collected At : **XXXXXXXXXXXXXXXX**

Sample Collected on (SCT) : **XXXXXXXXXXXXXXXX**
Sample Received on (SRT) : **XXXXXXXXXXXXXXXX**
Report Released on (RRT) : **XXXXXXXXXXXXXXXX**
Sample Type | Barcode : **XXXXXXXXXXXXXXXX**

TEST NAME	TECHNOLOGY	VALUE	UNITS	Bio. Ref. Interval.
ARSENIC	ICP-MS	0.33	µg/L	< 5
CADMIUM	ICP-MS	1.05	µg/L	< 1.5
MERCURY	ICP-MS	0.53	µg/L	< 5
LEAD	ICP-MS	51.33	µg/L	< 150
CHROMIUM	ICP-MS	1.29	µg/L	< 30
BARIUM	ICP-MS	3.48	µg/L	< 30
COBALT	ICP-MS	0.27	µg/L	0.10 - 1.50
CAESIUM	ICP-MS	2.58	µg/L	< 5
THALLIUM	ICP-MS	0.02	µg/L	< 1
URANIUM	ICP-MS	0.04	µg/L	< 1
STRONTIUM	ICP-MS	25.87	µg/L	8 - 38
ANTIMONY	ICP-MS	9.23	µg/L	0.10 - 18
TIN	ICP-MS	0.54	µg/L	< 2
MOLYBDENUM	ICP-MS	1.84	µg/L	0.70 - 4.0
SILVER	ICP-MS	1.19	µg/L	< 4
VANADIUM	ICP-MS	0.67	µg/L	< 0.8
BERYLLIUM	ICP-MS	0.05	µg/L	<0.10
BISMUTH	ICP-MS	0.35	µg/L	0.10 - 0.80
SELENIUM	ICP-MS	81	µg/L	60 - 340
ALUMINIUM	ICP-MS	9.37	µg/L	< 30
NICKEL	ICP-MS	2.55	µg/L	< 15
MANGANESE	ICP-MS	10.55	µg/L	7.10 - 20

Please correlate with clinical conditions.

Method :

ICP - MASS SPECTROMETRY
Note:Reference range has been obtained after considering 95% population as cutoff.

Dummy Report

Tests Done : **ELEMENTS 22 (TOXIC AND NUTRIENTS),HBA PROFILE,HEMOGRAM**

Doctor 1 Sign **Doctor 2 Sign**

Patient Name : **XXXXXXXXXXXXXXXX**
Referred By : **XXXXXXXXXXXXXXXX**
Sample Collected At : **XXXXXXXXXXXXXXXX**

Sample Collected on (SCT) : **XXXXXXXXXXXXXXXX**
Sample Received on (SRT) : **XXXXXXXXXXXXXXXX**
Report Released on (RRT) : **XXXXXXXXXXXXXXXX**
Sample Type | Barcode : **XXXXXXXXXXXXXXXX**

TEST NAME	TECHNOLOGY	VALUE	UNITS
HbA1c	H.P.L.C	5.6	%

Bio. Ref. Interval. :

As per ADA Guidelines
Below 5.7% : Normal
5.7% - 6.4% : Prediabetic
>=6.5% : Diabetic

Guidance For Known Diabetics
Below 6.5% : Good Control
6.5% - 7% : Fair Control
7.0% - 8% : Unsatisfactory Control
>8% : Poor Control

Method : Fully Automated H.P.L.C method

AVERAGE BLOOD GLUCOSE (ABG)	CALCULATED	114	mg/dL

Bio. Ref. Interval. :

90 - 120 mg/dl : Good Control
121 - 150 mg/dl : Fair Control
151 - 180 mg/dl : Unsatisfactory Control
> 180 mg/dl : Poor Control

Method : Derived from HBA1c values

Please correlate with clinical conditions.

Dummy Report

Tests Done : **ELEMENTS 22 (TOXIC AND NUTRIENTS),HBA PROFILE,HEMOGRAM**

Doctor 1 Sign **Doctor 2 Sign**

Patient Name : XXXXXXXXXXXXXXXX
Referred By : XXXXXXXXXXXXXXXX
Sample Collected At : XXXXXXXXXXXXXXXX

Sample Collected on (SCT) : XXXXXXXXXXXXXXXX
Sample Received on (SRT) : XXXXXXXXXXXXXXXX
Report Released on (RRT) : XXXXXXXXXXXXXXXX
Sample Type | Barcode : XXXXXXXXXXXXXXXX

TEST NAME	METHODOLOGY	VALUE	UNITS	Bio. Ref. Interval.
HEMOGLOBIN	**SLS-Hemoglobin Method**	**11.4**	**g/dL**	**12.0-15.0**
Hematocrit (PCV)	CPH Detection	39.6	%	36.0-46.0
Total RBC	**HF & EI**	**3.78**	**X 10^6/µL**	**3.8-4.8**
Mean Corpuscular Volume (MCV)	**Calculated**	**104.8**	**fL**	**83.0-101.0**
Mean Corpuscular Hemoglobin (MCH)	Calculated	30.2	pq	27.0-32.0
Mean Corp.Hemo. Conc (MCHC)	**Calculated**	**28.8**	**g/dL**	**31.5-34.5**
Red Cell Distribution Width - SD (RDW-SD)	**Calculated**	**63.5**	**fL**	**39.0-46.0**
Red Cell Distribution Width (RDW - CV)	**Calculated**	**16.3**	**%**	**11.6-14.0**
RED CELL DISTRIBUTION WIDTH INDEX (RDWI)	Calculated	451.9	-	*Refer Note below
MENTZER INDEX	Calculated	27.7	-	*Refer Note below
TOTAL LEUCOCYTE COUNT (WBC)	HF & FC	5.72	X 10^3 / µL	4.0 - 10.0
DIFFERENTIAL LEUCOCYTE COUNT				
Neutrophils Percentage	Flow Cytometry	52.8	%	40-80
Lymphocytes Percentage	Flow Cytometry	37.2	%	20-40
Monocytes Percentage	**Flow Cytometry**	**1.7**	**%**	**2-10**
Eosinophils Percentage	**Flow Cytometry**	**7.7**	**%**	**1-6**
Basophils Percentage	Flow Cytometry	0.3	%	0-2
Immature Granulocyte Percentage (IG%)	Flow Cytometry	0.3	%	0.0-0.4
Nucleated Red Blood Cells %	Flow Cytometry	0.01	%	0.0-5.0
ABSOLUTE LEUCOCYTE COUNT				
Neutrophils - Absolute Count	Calculated	3.02	X 10^3 / µL	2.0-7.0
Lymphocytes - Absolute Count	Calculated	2.13	X 10^3 / µL	1.0-3.0
Monocytes - Absolute Count	**Calculated**	**0.1**	**X 10^3 / µL**	**0.2 - 1.0**
Basophils - Absolute Count	Calculated	0.02	X 10^3 / µL	0.02 - 0.1
Eosinophils - Absolute Count	Calculated	0.44	X 10^3 / µL	0.02 - 0.5
Immature Granulocytes (IG)	Calculated	0.02	X 10^3 / µL	0.0-0.3
Nucleated Red Blood Cells	Calculated	0.01	X 10^3 / µL	0.0-0.5
PLATELET COUNT	HF & EI	244	X 10^3 / µL	150-410
Mean Platelet Volume (MPV)	Calculated	10.6	fL	6.5-12
Platelet Distribution Width (PDW)	Calculated	11.3	fL	9.6-15.2
Platelet to Large Cell Ratio (PLCR)	Calculated	28.6	%	19.7-42.4
Plateletcrit (PCT)	Calculated	0.26	%	0.19-0.39

Remarks : Alert!!! RBCs:Mild anisopoikilocytosis. Platelets:Appear adequate in smear.

***Note - Mentzer index (MI), RDW-CV and RDWI are hematological indices to differentiate between Iron Deficiency Anemia (IDA) and Beta Thalassemia Trait (BTT). MI >13, RDWI >220 and RDW-CV >14 more likely to be IDA. MI <13, RDWI <220, and RDW-CV <14 more likely to be BTT. Suggested Clinical correlation. BTT to be confirmed with HB electrophoresis if clinically indicated**

Method : Fully automated bidirectional analyser(6 Part Differential SYSMEX XN-1000)

(Reference : *FC- flowcytometry, *HF- hydrodynamic focussing, *EI- Electric Impedence, *Hb- hemoglobin, *CPH- Cumulative pulse height**)**

~~ End of report ~~

Tests Done : **ELEMENTS 22 (TOXIC AND NUTRIENTS),HBA PROFILE,HEMOGRAM**

Doctor 1 Sign **Doctor 2 Sign**

Dummy Report

CONDITIONS OF REPORTING

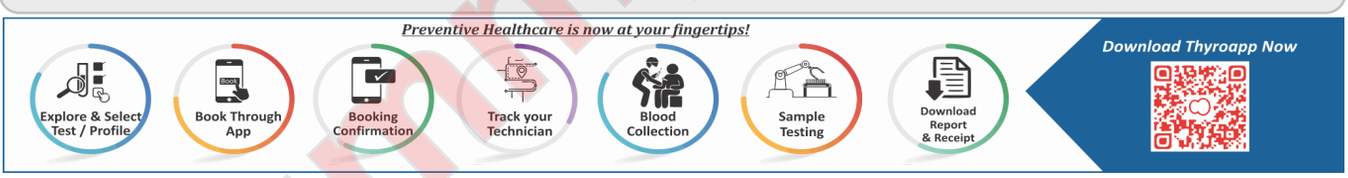
- The reported results are for information and interpretation of the referring doctor only.
- It is presumed that the tests performed on the specimen belong to the patient; named or identified.
- Results of tests may vary from laboratory to laboratory and also in some parameters from time to time for the same patient.
- Should the results indicate an unexpected abnormality, the same should be reconfirmed.
- Only such medical professionals who understand reporting units, reference ranges and limitations of technologies should interpret results.
- This report is not valid for medico-legal purpose.
- Neither Thyrocare, nor its employees/representatives assume: (a) any liability, responsibility for any loss or damage that may be incurred by any person as a result of presuming the meaning or contents of the report, (b) any claims of any nature whatsoever arising from or relating to the performance of the requested tests as well as any claim for indirect, incidental or consequential damages. The total liability, in any case, of Thyrocare shall not exceed the total amount of invoice for the services provided and paid for.
- Thyrocare Discovery video link :- https://youtu.be/nbdYeRgYyQc

EXPLANATIONS

- Majority of the specimen processed in the laboratory are collected by Pathologists and Hospitals we call them as "Clients".
- **Name** - The name is as declared by the client and recored by the personnel who collected the specimen.
- **Ref.Dr** - The name of the doctor who has recommended testing as declared by the client.
- **Labcode** - This is the accession number in our laboratory and it helps us in archiving and retrieving the data.
- **Barcode** - This is the specimen identity number and it states that the results are for the specimen bearing the barcode (irrespective of the name).
- **SCP** - Specimen Collection Point - This is the location where the blood or specimen was collected as declared by the client.
- **SCT** - Specimen Collection Time - The time when specimen was collected as declared by the client.
- **SRT** - Specimen Receiving Time - This time when the specimen reached our laboratory.
- **RRT** - Report Releasing Time - The time when our pathologist has released the values for Reporting.
- **Reference Range** - Means the range of values in which 95% of the normal population would fall.

SUGGESTIONS

- Values out of reference range requires reconfirmation before starting any medical treatment.
- Retesting is needed if you suspect any quality shortcomings.
- Testing or retesting should be done in accredited laboratories.
- For suggestions, complaints, clinical support or feedback, write to us at **customersupport@thyrocare.com** or call us on **022-3090 0000**





+ *T&C Apply, #As on 5th December 2024 (Applicable for all company owned labs except Bhagalpur & Vijayawada),*

⋆ *As per survey on doctors' perception of laboratory diagnostics (IJARIIT, 2023), -Mumbai Reference Lab is CAP Accredited*

Dummy Report