Redcliffe labs

Healthy India Ki Trusted Lab

smart Health Report

An Insightful Health Analytics Report for Easier Understanding

Prepared For

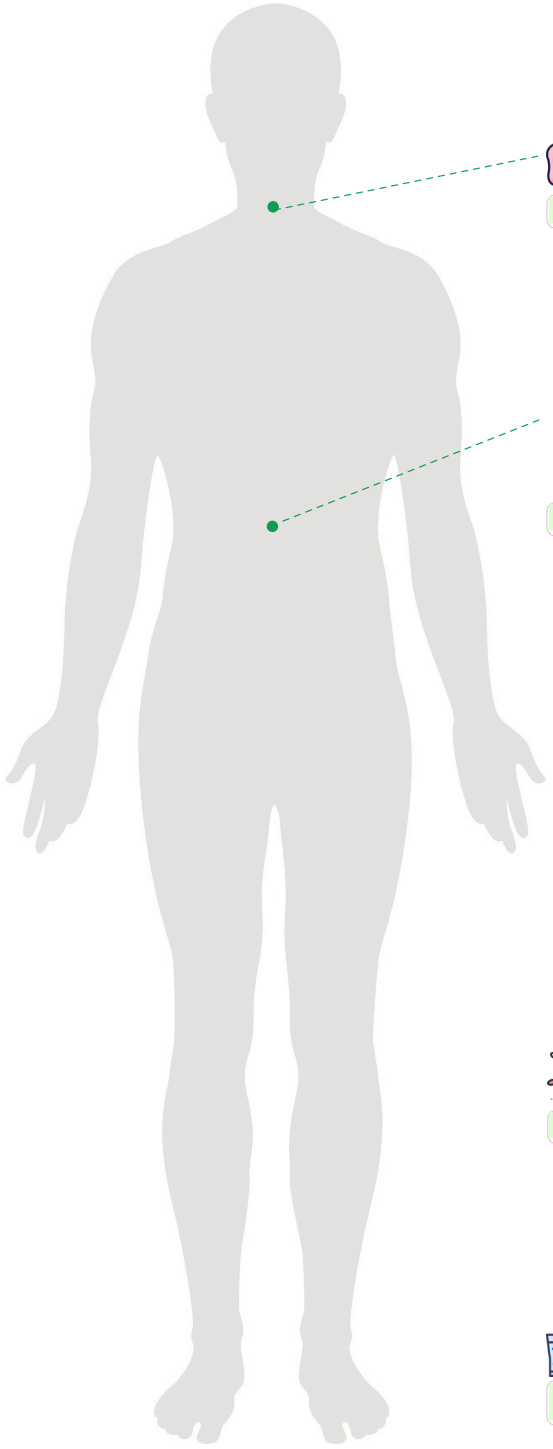
Mr MR.DUMMY

M 23

SMART HEALTH REPORT

Name	Patient ID	Gender	Age
Mr MR.DUMMY	8052618	M	23

Health Summary



BLOOD COUNTS
Everything looks good

THYROID PROFILE
Everything looks good

DIABETES MONITORING
Everything looks good

ANEMIA STUDIES
Everything looks good

VITAMIN PROFILE
Everything looks good

MINERAL PROFILE
Everything looks good

LABORATORY REPORT

Redcliffe labs

Patient Name	**: Mr MR.DUMMY**		
DOB/Age/Gender	: 23 Y/Male	Sample Collected	: Apr 26, 2024, 01:00 PM
Patient ID / UHID	: 8052618/RCL7249269	Report Date	: May 25, 2024, 06:45 PM.
Referred By	: Dr. Dr. X	Barcode No	: HY588483
Sample Type	: Whole blood EDTA	Report Status	: Final Report

Fatigue Syndrome Test

Complete Blood Count (CBC)

Test Description	Value(s)	Unit(s)	Reference Range
RBC Parameters			
Hemoglobin *colorimetric*	13.8	g/dL	13.0 - 17.0
RBC Count *Electrical impedance*	5.4	10^6/µl	4.5 - 5.5
PCV *Calculated*	42.1	%	40 - 50
MCV *Calculated*	**78.4**	fl	83 - 101
MCH *Calculated*	**25.6**	pg	27 - 32
MCHC *Calculated*	32.7	g/dL	31.5 - 34.5
RDW (CV) *Calculated*	13.7	%	11.6 - 14.0
RDW-SD *Calculated*	**34.8**	fl	35.1 - 43.9
WBC Parameters			
TLC *Electrical impedance and microscopy*	**12.2**	10^3/µl	4 - 10
Differential Leucocyte Count			
Neutrophils *Laser based Flow-cytometry*	70	%	40-80
Lymphocytes *Laser based Flow-cytometry*	20	%	20-40
Monocytes *Laser based Flow-cytometry*	8	%	2-10
Eosinophils *Laser based Flow-cytometry*	2	%	1-6
Basophils *Laser based Flow-cytometry*	0	%	<2
Absolute Leukocyte Counts			
Neutrophils. *Calculated*	**8.54**	10^3/µl	2 - 7
Lymphocytes. *Calculated*	2.44	10^3/µl	1 - 3
Monocytes. *Calculated*	0.98	10^3/µl	0.2 - 1.0
Eosinophils. *Calculated*	0.24	10^3/µl	0.02 - 0.5
Basophils.	**0**	10^3/µl	0.02 - 0.5

Dr. Dummy

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Sample Type	: Whole blood EDTA	Report Status	: Final Report

Test Description	Value(s)	Unit(s)	Reference Range
Calculated			
Platelet Parameters			
Platelet Count *Electrical impedance and microscopy*	217	10^3/µl	150 - 410
Mean Platelet Volume (MPV) *Calculated*	9.9	fL	9.3 - 12.1
PCT *Calculated*	0.2	%	0.17 - 0.32
PDW *Calculated*	17.3	fL	8.3 - 25.0
P-LCR *Calculated*	34.5	%	18 - 50
P-LCC *Calculated*	75	%	44 - 140
Mentzer Index *Calculated*	14.52	%	> 13

Interpretation:
CBC provides information about red cells, white cells and platelets. Results are useful in the diagnosis of anemia, infections, leukemias, clotting disorders and many other medical conditions.

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Test Description	Value(s)	Unit(s)	Reference Range

Erythrocyte Sedimentation Rate (ESR)

ESR - Erythrocyte Sedimentation Rate *MODIFIED WESTERGREN*	8	mm/hr	0 - 10

Interpretation:
ESR is also known as Erythrocyte Sedimentation Rate. An ESR test is used to assess inflammation in the body. Many conditions can cause an abnormal ESR, so an ESR test is typically used with other tests to diagnose and monitor different diseases. An elevated ESR may occur in inflammatory conditions including infection, rheumatoid arthritis ,systemic vasculitis, anemia, multiple myeloma , etc. Low levels are typically seen in congestive heart failure, polycythemia ,sickle cell anemia, hypo fibrinogenemia , etc.

AGE	MALE	FEMALE
1 DAY	0-2	0-2
2 - 7 DAYS	0-4	0-4
8 - 14 DAYS	0-17	0-17
15 DAYS - 17 YEARS	0-20	0-20
18 - 50 YEARS	0-10	0-12
51- 60 YEARS	0-12	0-19
61 - 70 YEARS	0-14	0-20
71 - 100 YEARS	0-30	0-35

Reference- Dacie and lewis practical hematology

Dr. Dummy

Patient Name	: **Mr MR.DUMMY**		
DOB/Age/Gender	: 23 Y/Male	Sample Collected	: Apr 26, 2024, 01:00 PM
Patient ID / UHID	: 8052618/RCL7249269	Report Date	: May 25, 2024, 06:43 PM.
Referred By	: Dr. Dr. X	Barcode No	: HY588483
Sample Type	: Whole blood EDTA	Report Status	: Final Report

HbA1C (Glycosylated Haemoglobin)

Test Description	Value(s)	Unit(s)	Reference Range
Glycosylated Hemoglobin (HbA1c) *HPLC*	5.4	%	< 5.7
Estimated Average Glucose	108.28	mg/dL	Refer Table Below

Interpretation:

Interpretation For HbA1c% As per American Diabetes Association (ADA)

Reference Group	HbA1c in %
Non diabetic adults >=18 years	<5.7
At risk (Prediabetes)	5.7 - 6.4
Diagnosing Diabetes	>= 6.5
Therapeutic goals for glycemic control	Age > 19 years Goal of therapy: < 7.0 Age < 19 years Goal of therapy: <7.5

Note:

1. Since HbA1c reflects long term fluctuations in the blood glucose concentration, a diabetic patient who is recently under good control may still have a high concentration of HbA1c. Converse is true for a diabetic previously under good control but now poorly controlled. 2. Target goals of < 7.0 % may be beneficial in patients with short duration of diabetes, long life expectancy and no significant cardiovascular disease. In patients with significant complications of diabetes, limited life expectancy or extensive co-morbid conditions, targeting a goal of < 7.0 % may not be appropriate

Comments :

HbA1c provides an index of average blood glucose levels over the past 8 - 12 weeks and is a much better indicator of long term glycemic control as compared to blood and urinary glucose determinations ADA criteria for correlation between HbA1c & Mean plasma glucose levels.

HbA1c(%)	Mean Plasma Glucose (mg/dL)	HbA1c(%)	Mean Plasma Glucose (mg/dL)
6	126	12	298
8	183	14	355
10	240	16	413

Dr. Dummy

Patient Name	: **Mr MR.DUMMY**		
DOB/Age/Gender	: 23 Y/Male	Sample Collected	: Apr 26, 2024, 01:00 PM
Patient ID / UHID	: 8052618/RCL7249269	Report Date	: May 08, 2024, 12:01 PM.
Referred By	: Dr. Dr. X	Barcode No	: ZC670295
Sample Type	: Serum	Report Status	: Final Report

Iron Studies

Test Description	Value(s)	Unit(s)	Reference Range
Iron *FerroZine*	122.5	µg/dL	33 - 193
TIBC,(Total Iron Binding Capacity) *Calculated*	423.5	µg/dL	228 - 428
UIBC *FerroZine*	301	µg/dL	125 - 345
Transferrin Saturation *Calculated*	28.93	%	16 - 45

Interpretation:
Increased levels due to iron ingestion or ineffective erythropoiesis.Decreased levels due to infection, inflammation, malignancy, menstruation and Fe deficiency.Needs to be taken into consideration with TIBC. Transferrin Saturation:- Low level Transferrin Saturation can indicate iron deficiency, erythropoiesis, infection, or inflammation. High level Transferrin Saturation can indicate recent ingestion of dietary iron,ineffective erythropoiesis,haemochromatosis or liver disease.High TIBC, UIBC, or transferrin usually indicates iron deficiency, but they are also increased in pregnancy and with the use of oral contraceptives. Low TIBC, UIBC, or transferrin may occur if someone has:Hemochromatosis, Certain types of anemia due to accumulated iron,Malnutrition,kidney disease that causes a loss of protein in urine.

Dr. Dummy

Patient Name	**: Mr MR.DUMMY**		
DOB/Age/Gender	: 23 Y/Male	Sample Collected	: Apr 26, 2024, 01:00 PM
Patient ID / UHID	: 8052618/RCL7249269	Report Date	: May 09, 2024, 12:59 PM.
Referred By	: Dr. Dr. X	Barcode No	: ZC670295
Sample Type	: Serum	Report Status	: Final Report

Ferritin

Test Description	Value(s)	Unit(s)	Reference Range
Ferritin *CMIA*	54.0	ng/mL	21.81 - 274.66

Interpretation:
Note:
Increase in serum ferritin due to inflammatory conditions (Acute phase response) can mask a diagnostically low result

Comments
Serum ferritin appears to be in equilibrium with tissue ferritin and is a good indicator of storage iron in normal subjects and in most disorders. In patients with some hepatocellular diseases, malignancies and inflammatory diseases, serum ferritin is a disproportionately high estimate of storage iron because serum ferritin is an acute phase reactant. In such disorders iron deficiency anemia may exist with a normal serum ferritin concentration. In the presence of inflammation, persons with low serum ferritin are likely to respond to iron therapy.

Increased Levels
1. Iron overload - Hemochromatosis, Thalassemia & Sideroblastic anemia
2. Malignant conditions - Acute myeloblastic & Lymphoblastic leukemia, Hodgkin's disease & Breast carcinoma
3. Inflammatory diseases - Pulmonary infections, Osteomyelitis, Chronic UTI, Rheumatoid arthritis, SLE, burns · Acute & Chronic hepatocellular disease

Decreased Levels
Iron deficiency anemia

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Patient ID / UHID	: 8052618/RCL7249269	Report Date	: May 08, 2024, 11:53 AM.
Referred By	: Dr. Dr. X	Barcode No	: ZC670295
Sample Type	: Serum	Report Status	: Final Report

Test Description	Value(s)	Unit(s)	Reference Range

Vitamin B12 / Cyanocobalamin

Vitamin - B12 *CMIA*	480.0	pg/mL	187 - 883

Interpretation:
Low Values are a sign of a vitamin B12 deficiency. People with this deficiency are likely to have or develop symptoms.
Causes of vitamin B12 deficiency include:Not enough vitamin B12 in diet (rare except with a strict vegetarian diet), Diseases that cause malabsorption (for example, celiac disease and Crohn's disease), Lack of intrinsic factor, Above normal heat production (for example, with hyperthyroidism), Pregnancy. Increased vitamin B12 levels are uncommon. Usually excess vitamin B12 is removed in the urine. Conditions that can increase B12 levels include: Liver disease (such as cirrhosis or hepatitis), Myeloproliferative disorders (for example, polycythemia vera and chronic myelocytic leukemia).

Vitamin B12: Low Levels can cause malabsorption, Lack of intrinsic factor, Above normal heat production (for example, with hyperthyroidism), Pregnancy.High Level Liver disease, Myeloproliferative disorders (for example, polycythemia vera and chronic myelocytic leukemia).

1. Out of 140 healthy indian population, 91% of Vitamin B 12 concentrations was at lower level: 59.00 pg/ml and upper level: 700.00 pg/ml

"Patients on Biotin supplement may have interference in some immunoassays. Ref: Arch Pathol Lab Med—Vol 141, November 2017. With individuals taking high dose Biotin (more than 5 mg per day) supplements, at least 8-hour wait time before blood draw is recommended."

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Referred By	: Dr. Dr. X	Barcode No	: ZC670295
Sample Type	: Serum	Report Status	: Final Report

Test Description	Value(s)	Unit(s)	Reference Range
Vitamin D 25 Hydroxy			
Vitamin D 25 - Hydroxy *CMIA*	85.0	ng/mL	Deficient <20 Insufficient 21 - 29 Sufficient 30 - 100

Interpretation:
25-Hydroxy vitamin D represents the main body reservoir and transport form. Mild to moderate deficiency is associated with Osteoporosis / Secondary Hyperparathyroidism while severe deficiency causes Rickets in children and Osteomalacia in adults. Prevalence of Vitamin D deficiency is approximately >50% specially in the elderly. This assay is useful for diagnosis of vitamin D deficiency and Hypervitaminosis D. It is also used for differential diagnosis of causes of Rickets & Osteomalacia and for monitoring Vitamin D replacement therapy.

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Patient ID / UHID	: 8052618/RCL7249269	Report Date	: May 08, 2024, 12:09 PM.
Referred By	: Dr. Dr. X	Barcode No	: ZC670295
Sample Type	: Serum	Report Status	: Final Report

Test Description	Value(s)	Unit(s)	Reference Range

Thyroid Profile Total

Triiodothyronine (T3) *ECLIA*	115.0	ng/dL	80 - 200
Total Thyroxine (T4) *ECLIA*	9.0	µg/dL	5.1 - 14.1
Thyroid Stimulating Hormone (Ultrasensitive) *ECLIA*	3.5	mIU/L	0.27 - 4.20

Interpretation:

Pregnancy	Reference ranges TSH
1 st Trimester	0.1 - 2.5
2 ed Trimester	0.2 - 3.0
3 rd Trimester	0.3 - 3.0

Primary malfunction of the thyroid gland may result in excessive (hyper) or below normal (hypo) release of T3 or T4. In addition as TSH directly affects thyroid function, malfunction of the pituitary or the hypo - thalamus influences the thyroid gland activity. Disease in any portion of the thyroid-pitutary-hypothala- mus system may influence the levels of T3 and T4 in the blood. In primary hypothyroidism, TSH levels are significantly elevated, while in secondary and tertiary hypothyroidism, TSH levels may be low. In addition, in the Euthyroid Sick Syndrome, multiple alterations in serum thyroid function test findings have been recognized in patients with a wide variety of non-thyroidal illnesses (NTI) without evidence of preexisting thyroid or hypothalami c-pitutary diseases. Thyroid Binding Globulin (TBG) concentrations remain relatively constant in healthy individuals. However, pregnancy, excess estrogen's, androgen's, antibiotic steroids and glucocorticoids are known to alter TBG levels and may cause false thyroid values for Total T3 and T4 tests.

TSH	T4	T3	INTERPRETATION
High	Normal	Normal	Mild (subclinical) hypothyroidism
High	Low	Low or normal	Hypothyroidism
Low	Normal	Normal	Mild (subclinical) hyperthyroidism
Low	High or normal	High or normal	Hyperthyroidism
Low	Low or normal	Low or normal	Nonthyroidal illness; pituitary (secondary) hypothyroidism
Normal	High	High	Thyroid hormone resistance syndrome (a mutation in the thyroid hormone receptor decreases thyroid hormone function)

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LABORATORY REPORT

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Patient Name	**: Mr MR.DUMMY**		
DOB/Age/Gender	: 23 Y/Male	Sample Collected	: Apr 26, 2024, 01:00 PM
Patient ID / UHID	: 8052618/RCL7249269	Report Date	: May 25, 2024, 06:49 PM.
Referred By	: Dr. Dr. X	Barcode No	: YA609822
Sample Type	: Spot Urine	Report Status	: Final Report

Urine Routine and Microscopic Examination

Test Description	Value(s)	Unit(s)	Reference Range
Physical Examination			
Volume	20	ml	-
Colour	Pale yellow	-	Pale yellow
Transparency	Clear	-	Clear
Deposit	Absent	-	Absent
Chemical Examination			
Reaction (pH) *Double Indicator*	5.0	-	4.5 - 8.0
Specific Gravity *Ion Exchange*	1.020	-	1.010 - 1.030
Urine Glucose (sugar) *Oxidase / Peroxidase*	Negative	-	Negative
Urine Protein (Albumin) *Acid / Base Colour Excahnge*	Negative	-	Negative
Urine Ketones (Acetone) *Legals Test*	Negative	-	Negative
Blood *Peroxidase Hemoglobin*	Negative	-	Negative
Leucocyte esterase *Enzymatic Reaction*	Negative	-	Negative
Bilirubin Urine *Coupling Reaction*	Negative	-	Negative
Nitrite *Griless Test*	Negative	-	Negative
Urobilinogen *Ehrlichs Test*	Normal	-	Normal
Microscopic Examination			
Pus Cells (WBCs)	1-2	/hpf	0 - 5
Epithelial Cells	1-2	/hpf	0 - 4
Red blood Cells	Absent	/hpf	Absent
Crystals	Absent	-	Absent
Cast	Absent	-	Absent
Yeast Cells	Absent	-	Absent
Amorphous deposits	Absent	-	Absent
Bacteria	Absent	-	Absent
Protozoa	Absent	-	Absent

Interpretation:

URINALYSIS- Routine urine analysis assists in screening and diagnosis of various metabolic, urological, kidney and liver disorders.

Protein: Elevated proteins can be an early sign of kidney disease. Urinary protein excretion can also be temporarily elevated by strenuous exercise, orthostatic proteinuria, dehydration, urinary tract infections and acute illness with fever

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Test Description	Value(s)	Unit(s)	Reference Range

Glucose: Uncontrolled diabetes mellitus can lead to presence of glucose in urine. Other causes include pregnancy, hormonal disturbances, liver disease and certain medications.

Ketones: Uncontrolled diabetes mellitus can lead to presence of ketones in urine. Ketones can also be seen in starvation, frequent vomiting, pregnancy and strenuous exercise.

Blood: Occult blood can occur in urine as intact erythrocytes or haemoglobin, which can occur in various urological, nephrological and bleeding disorders.

Leukocytes: An increase in leukocytes is an indication of inflammation in urinary tract or kidneys. Most common cause is bacterial urinary tract infection.

Nitrite: Many bacteria give positive results when their number is high. Nitrite concentration during infection increases with length of time the urine specimen is retained in bladder prior to collection.

pH: The kidneys play an important role in maintaining acid base balance of the body. Conditions of the body producing acidosis/ alkalosis or ingestion of certain type of food can affect the pH of urine.

Specific gravity: Specific gravity gives an indication of how concentrated the urine is. Increased specific gravity is seen in conditions like dehydration, glycosuria and proteinuria while decreased specific gravity is seen in excessive fluid intake, renal failure and diabetes insipidus.

Bilirubin: In certain liver diseases such as biliary obstruction or hepatitis, bilirubin gets excreted in urine.

Urobilinogen: Positive results are seen in liver diseases like hepatitis and cirrhosis and in cases of haemolytic anaemia.

*** End Of Report ***

Disclaimer: Method given in report are only indicative and can be changed depending upon type of machine and kit available at time of testing.

Not all tests at all locations are under NABL scope. Availability of tests under NABL scope varies from lab to lab.

Dr. Dummy

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2. It is to be presumed that the tests performed pertain to the specimen/sample attributed to the Customer's name or identification. It is presumed that the verification particulars have been cleared out by the customer or his/her representation at the point of generation of said specimen / sample. It is hereby clarified that the reports furnished are restricted solely to the given specimen only.

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