

India's trusted Health Test @Home Service

National Reference Laboratory in Delhi NCR



Booking ID : 10575199498

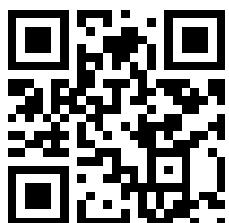
Sample Collection Date : 19/Apr/2024

Sharadchandra V Tilay

Male, 79 Yrs

A Comprehensive Health Analysis Report

AI Based Personalized Report for You



INDIA'S FIRST & ONLY CREDIBILITY CHECK FOR YOUR LAB REPORT

Check the authenticity of your lab report with machine data

Scan the QR using any QR code scanner

HEALTH ANALYSIS

Personalized Summary & Vital Parameters

Sharadchandra V Tilay

Booking ID : 10575199498 | Sample Collection Date : 19/Apr/2024

Sharadchandra V Tilay,

Congratulations, We have successfully completed your health diagnosis. This is a big step towards staying on top of your health and identify potential to improve!

10 Vital Health Parameters of a Human Body Ecosystem

Below are the health parameters which require routine checkups for primary healthcare. The view also includes *personalised information* depending on the tests you have taken.

Your Health Score

73

Out of 100

*Calculated from test reports


Thyroid Function

Thyroid Stimulating Hormone (TSH)-Ultrasensitive : 5.86 μ U/ml
 • Concern



Vitamin B12

564 pg/ml
 • Everything looks good



Cholesterol Total

153.4 mg/dl
 • Everything looks good



Liver Function

Alanine Aminotransferase (ALT/SGPT) : 27.3 U/L
 • Everything looks good



Kidney Function

Serum Creatinine : 0.92 mg/dl
 • Everything looks good



Calcium Total

9.3 mg/dl
 • Everything looks good



Vitamin D

33.48 ng/ml
 • Everything looks good



Iron studies

Serum Iron : 54 μ g/dl
 • Concern



HbA1c

6.3 %
 • Concern



Complete Hemogram

Haemoglobin (HB) : 13.4 g/dL
 • Everything looks good



**New Features**

Report Summary

Understanding laboratory reports can be complex, often leading to unwarranted anxiety.

At Healthians, we understand that you shouldn't have to rely on a Google search to decipher your own health report. That's why we offer comprehensive summaries that are easy to understand.

Sharadchandra V Tilay
Booking ID 10575199498 | Sample Collection Date: 19/Apr/2024

Summary of Deranged Parameters:

Mr. Sharadchandra V tilay, after reviewing your recent health test results, it appears that you have several parameters that are outside the normal range. These include LDH Lactate Dehydrogenase, HsCRP, Homocysteine, Blood Glucose Fasting, CRP, CEA, HDL Cholesterol Direct, CHOL/HDL RATIO, LDL Cholesterol Cal, LDL / HDL Cholesterol Ratio Cal, WBC-Total Counts Leucocytes, RDW, Eosinophils, Lymphocytes, RDW-CV, HbA1c, BUN Urea Nitrogen, Urea, Iron, TSH Ultra-Sensitive, Bilirubin Direct, Bilirubin Total, Bilirubin-Indirect, A/G Ratio, SGOT/SGPT Ratio, PSA-total Prostate Specific Antigen, HDL Cholesterol Direct, and CHOL/HDL RATIO.

Suggestions for Deranged Parameters:

1. It is important to focus on a balanced diet and regular physical activity to help manage your blood glucose levels and lipid profile.
2. Consider incorporating more heart-healthy foods into your diet to improve your cholesterol levels.
3. Discuss with your healthcare provider about potential lifestyle modifications that could help in managing your kidney function and liver function test results.
4. Follow up with your healthcare provider to further investigate the deranged parameters and develop a personalized plan to address these concerns.

Remember, these results provide valuable information for your overall health, and with the right guidance and support, you can work towards improving these parameters.

| | | | | |
|----------------|-------------------------|---------------------|-----------------------|---|
| Patient Name | : Sharadchandra V Tilay | Barcode | : E1107250 |  |
| Age/Gender | : 79Y OM OD /Male | Sample Collected On | : 19/Apr/2024 08:55AM | |
| Order Id | : 10575199498 | Sample Received On | : 19/Apr/2024 05:45PM | |
| Referred By | : Self | Report Generated On | : 19/Apr/2024 07:39PM | |
| Customer Since | : 19/Apr/2024 | Sample Temperature | : Maintained ✓ | |
| Sample Type | : Whole Blood EDTA | Report Status | : Final Report | |

DEPARTMENT OF BIOCHEMISTRY HBA1C

Healthians 100 Good Health Upgrade Package

| Test Name | Value | Unit | Bio. Ref Interval |
|-----------|-------|------|-------------------|
|-----------|-------|------|-------------------|

HbA1c - Glycosylated Hemoglobin

| | | | |
|--|-------------|-------|-----------|
|  HbA1c (Glycosylated Hemoglobin) Method: HPLC | 6.30 | % | 4.2 - 5.7 |
|  Average Estimated Glucose - plasma Method: Calculated | 134.11 | mg/dl | |

INTERPRETATION:

AS PER AMERICAN DIABETES ASSOCIATION (ADA):

REFERENCE GROUP

Non diabetic

At Risk (Prediabetes)

Diagnosing Diabetes

GLYCOSYLATED HEMOGLOBIN (HbA1c) in %

<5.7

5.7 – 6.4

>= 6.5

Age > 19 Years

Goals of Therapy: < 7.0

Actions Suggested: >8.0

Age < 19 Years

Goal of therapy: <7.5

Therapeutic goals for glycemic control

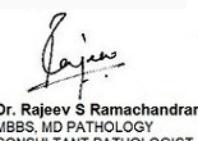
REMARKS :

1. HbA1c is used for monitoring diabetic control. It reflects the mean plasma glucose over three months
2. HbA1c may be falsely low in diabetics with hemolytic disease. In these individuals a plasma fructosamine level may be used which evaluates diabetes over 15 days.
3. Inappropriately low HbA1c values may be reported due to hemolysis, recent blood transfusion, acute blood loss, hypertriglyceridemia, chronic liver disease. Drugs like dapson, ribavirin, antiretroviral drugs, trimethoprim, may also cause interference with estimation of HbA1c, causing falsely low values.
4. HbA1c may be increased in patients with polycythemia or post-splenectomy.
5. Inappropriately higher values of HbA1c may be caused due to iron deficiency, vitamin B12 deficiency, alcohol intake, uremia, hyperbilirubinemia and large doses of aspirin.
6. Trends in HbA1c are a better indicator of diabetic control than a solitary test.
7. Any sample with >15% HbA1c should be suspected of having a hemoglobin variant, especially in a non-diabetic patient. Similarly, below 4% should prompt additional studies to determine the possible presence of variant hemoglobin.
8. HbA1c target in pregnancy is to attain level <6 % .
9. HbA1c target in paediatric age group is to attain level < 7.5 %.

Method : Ion-exchange high-performance liquid chromatography (HPLC).

Reference : American Diabetes Associations. Standards of Medical Care in Diabetes 2023

10.



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SIN No:E1107250

Patient Name : Sharadchandra V Tilay
 Age/Gender : 79Y OM OD /Male
 Order Id : 10575199498
 Referred By : Self
 Customer Since : 19/Apr/2024
 Sample Type : Flouride Plasma

Barcode : E1107250 
 Sample Collected On : 19/Apr/2024 08:55AM
 Sample Received On : 19/Apr/2024 05:45PM
 Report Generated On : 19/Apr/2024 06:40PM
 Sample Temperature : Maintained ✓
 Report Status : Final Report

DEPARTMENT OF BIOCHEMISTRY

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| Test Name | Value | Unit | Bio. Ref Interval |
|-----------|-------|------|-------------------|
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Fasting Blood Sugar

 Glucose, Fasting
 Method: Hexokinase

113.37

mg/dl

70 - 100

American Diabetes Association Reference Range :

Normal : < 100 mg/dL
 Impaired fasting glucose(Prediabetes) : 100 - 125 mg/dL
 Diabetes : >= 126 mg/dL

Conditions that can result in an elevated blood glucose level include: Acromegaly, Acute stress (response to trauma, heart attack, and stroke for instance), Chronic kidney disease, Cushing syndrome, Excessive consumption of food, Hyperthyroidism, Pancreatitis

A low level of glucose may indicate hypoglycemia, a condition characterized by a drop in blood glucose to a level where first it causes nervous system symptoms (sweating, palpitations, hunger, trembling, and anxiety), then begins to affect the brain (causing confusion, hallucinations, blurred vision, and sometimes even coma and death). A low blood glucose level (hypoglycemia) may be seen with: Adrenal insufficiency, Drinking excessive alcohol, Severe liver disease, Hypopituitarism, Hypothyroidism, Severe infections, Severe heart failure, Chronic kidney (renal) failure, Insulin overdose, Tumors that produce insulin (insulinomas), Starvation.



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| Referred By | : | Self | Report Generated On | : | 19/Apr/2024 07:15PM | |
| Customer Since | : | 19/Apr/2024 | Sample Temperature | : | Maintained ✓ | |
| Sample Type | : | Serum | Report Status | : | Final Report | |

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Potassium - Serum

 Serum Potassium
Method: ISE (Indirect)

4.09 mmol/L

3.5 - 5.5

Potassium is a primary intracellular ion, only 2% is extracellular, high intracellular concentration is maintained by a Na-K ATPase pump, which continuously transports potassium into the cell against a concentration gradient. The pump is a critical factor in maintaining and adjusting the ionic gradients, on which nerve impulse transmission and contractility of cardiac and skeletal muscle depends. In acidemia, potassium moves out of the cells, in alkalemia, potassium moves into the cells. Hypokalemia inhibits aldosterone production and hyperkalemia stimulates aldosterone production.



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| Customer Since | : | 19/Apr/2024 | Sample Temperature | : | Maintained ✓ | |
| Sample Type | : | Serum | Report Status | : | Final Report | |

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Healthians 100 Good Health Upgrade Package

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Rheumatoid Factor (RA) - Quantitative - Serum

RHEUMATOID FACTOR

<10

IU/mL

<14

Method: Immunoturbidimetry

The rheumatoid factor (RF) test is primarily used to help diagnose rheumatoid arthritis (RA) and to help distinguish RA from other forms of arthritis or other conditions that cause similar symptoms. A cyclic citrullinated peptide (CCP) antibody test can help diagnose RA in someone who has joint inflammation with symptoms that suggest but do not yet meet the criteria of RA and may be ordered along with RF or if the RF result is negative. The RF test must be interpreted in conjunction with a person's symptoms and clinical history. A negative RF test does not rule out RA.

About 20% of people with RA will have very low levels of or no detectable RF. In these cases, a CCP antibody test may be positive and used to confirm RA. Positive RF test results may also be seen in 1-5% of healthy people and in some people with conditions such as: Sjogren syndrome, scleroderma, systemic lupus erythematosus (lupus), sarcoidosis, endocarditis, tuberculosis, syphilis, HIV/AIDS, hepatitis, infectious mononucleosis, cancers such as leukemia and multiple myeloma, parasitic infection, or disease of the liver, lung or kidney.



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| Order Id | : 10575199498 | Sample Received On | : 19/Apr/2024 05:43PM | |
| Referred By | : Self | Report Generated On | : 20/Apr/2024 11:17AM | |
| Customer Since | : 19/Apr/2024 | Sample Temperature | : Maintained ✓ | |
| Sample Type | : Serum | Report Status | : Final Report | |

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| Test Name | Value | Unit | Bio. Ref Interval |
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LDH (Lactate Dehyderogenase) - Serum

 LDH: LACTATE DEHYDROGENASE
Method: IFCC

401.30

U/L

< 248

KINDLY CORRELATE CLINICALLY, WITH MEDICATION HISTORY AND WITH OTHER RELEVANT INVESTIGATIONS.

RESULT RECHECKED.

REPEAT WITH FRESH SAMPLE IF CLINICALLY INDICATED.

LDH: LDH is present in many kinds of organs and tissues throughout the body, including the liver, heart, pancreas, kidneys, skeletal muscles, lymph tissue, and blood cells. Elevated levels of LDH can include cerebrovascular accident, such as stroke, certain cancers, heart attack, hemolytic anemia, infectious mononucleosis, liver disease, such as hepatitis, muscle injury, muscular dystrophy, pancreatitis, use of alcohol or certain drugs, sepsis and septic shock.


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| Referred By | : | Self | Report Generated On | : | 19/Apr/2024 07:15PM | |
| Customer Since | : | 19/Apr/2024 | Sample Temperature | : | Maintained ✓ | |
| Sample Type | : | Serum | Report Status | : | Final Report | |

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| Test Name | Value | Unit | Bio. Ref Interval |
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Amylase - Serum

 **AMYLASE**
Method: CNPG3

31.6 U/L 22 - 80

Amylase is produced by exocrine pancreas and also by the salivary glands. It is used to evaluate pancreatic function and also used in the diagnosis and management of pancreatitis.

Diseases resulting in elevation of plasma alpha-amylase include: acute pancreatitis, parotitis, alcoholism, renal insufficiency and diseases such as viral hepatitis, AIDS, abdominal typhoid, sarcoidosis and trauma to the upper abdomen. There is also a detectable increase in amylase after an ERCP procedure. In acute pancreatitis, amylase increases 5-6 hours after the onset of symptoms and remains elevated for 2-5 days. The increase in plasma activity does not reflect disease severity and conversely, extensive destruction of the pancreas may not cause a significant increase in the plasma concentration of pancreatic alpha-amylase.

Lipase - Serum

 **LIPASE**
Method: Colorimetric

11 U/L <67

Lipase is produced in the acinar cells of the pancreas and is responsible for the hydrolysis of water-insoluble long chain fatty acid esters of glycerol. Lipase measurement in serum and plasma is used exclusively for the investigation of pancreatic disorders, usually pancreatitis. Serum lipase may be elevated in acute pancreatitis, acute episodes of chronic pancreatitis and obstructive pancreatitis.

Slight elevations are also frequently present in diabetic ketoacidosis, viral hepatitis, epidemic parotitis, abdominal typhoid and sarcoidosis, due to involvement of the pancreas.



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| Referred By | : Self | Report Generated On | : 19/Apr/2024 07:15PM | |
| Customer Since | : 19/Apr/2024 | Sample Temperature | : Maintained ✓ | |
| Sample Type | : Serum | Report Status | : Final Report | |

DEPARTMENT OF BIOCHEMISTRY

Healthians 100 Good Health Upgrade Package

| Test Name | Value | Unit | Bio. Ref Interval |
|-----------|-------|------|-------------------|
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C-Reactive Protein (CRP) -Quantitative

C-REACTIVE PROTEIN (CRP)
(QUANTITATIVE)

Method: Immunoturbidimetric

C-reactive protein (CRP) is one of the most sensitive acute-phase reactants for inflammation. Measuring changes in the concentration of CRP provides useful diagnostic information about the level of acuity and severity of a disease. Unlike ESR, CRP levels are not influenced by hematologic conditions such as anemia, polycythemia etc.

Increased levels are consistent with an acute inflammatory process. After onset of an acute phase response, the serum CRP concentration rises rapidly (within 6-12 hours and peaks at 24-48 hours) and extensively. Concentrations above 100 mg/L are associated with severe stimuli such as major trauma and severe infection (sepsis).

hs CRP (C-Reactive Protein high sensitive)

HS-CRP (HIGH SENSITIVITY C-REACTIVE PROTEIN)

Method: Latex Particle Immunoturbidimetry

High sensitivity C-reactive protein, when used in conjunction with other clinical laboratory evaluation of acute coronary syndromes, may be useful as an independent marker of prognosis for recurrent events in patients with stable coronary disease or acute coronary syndrome. Hs-CRP levels should not be substituted for assessment of traditional cardiovascular risk factors. Patients with persistently unexplained, marked elevation of hs-CRP after repeated testing should be evaluated for non-cardiovascular etiologies.

Clinical significance :

Hs-CRP measurements may be used as an independent risk marker for the identification of individuals at risk for future cardiovascular disease. Elevated CRP values may be indicative of prognosis of individuals with acute coronary syndromes, and may be useful in the management of such individuals.



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| Referred By | : Self | Report Generated On | : 19/Apr/2024 07:13PM | |
| Customer Since | : 19/Apr/2024 | Sample Temperature | : Maintained ✓ | |
| Sample Type | : Serum | Report Status | : Final Report | |

DEPARTMENT OF BIOCHEMISTRY

Healthians 100 Good Health Upgrade Package

| Test Name | Value | Unit | Bio. Ref Interval |
|---|-------------|-------|-------------------|
| Liver Function Test (LFT) | | | |
| Serum Bilirubin, (Total) Method: Diazonium Ion | 2.94 | mg/dl | 0.3 - 1.2 |
| Serum Bilirubin, (Direct) Method: Diazotization | 0.97 | mg/dl | 0 - 0.2 |
| Serum Bilirubin, (Indirect) Method: Calculated | 1.97 | mg/dl | 0.0 - 0.8 |
| Aspartate Aminotransferase (AST/SGOT) Method: UV with P5P | 44.40 | U/L | 3- 50 |
| Alanine Aminotransferase (ALT/SGPT) Method: UV without P5P - IFCC Ref. Proc., Calibrated | 27.3 | U/L | 3 - 50 |
| Alkaline Phosphatase (ALP) Method: IFCC AMP Buffer | 100.20 | U/L | 43 - 115 |
| Gamma Glutamyl Transferase (GGT) Method: G-glutamyl-carboxy- nitroanalide-IFCC | 46.5 | U/L | 5 - 55 |
| Serum Total Protein Method: Biuret | 7.32 | g/dL | 6.6 - 8.3 |
| Serum Albumin Method: Bromo Cresol Green(BCG) | 3.82 | g/dl | 3.5 - 5.2 |
| Serum Globulin Method: Calculated | 3.50 | gm/dl | 3.0 - 4.2 |
| Albumin/Globulin Ratio Method: Calculated | 1.09 | Ratio | 1.2 - 2.5 |
| SGOT/SGPT Ratio Method: Calculated | 1.63 | Ratio | 0.7 - 1.4 |

Bilirubin is a yellowish pigment found in bile and is a breakdown product of normal heme catabolism. Elevated levels results from increased bilirubin production (eg hemolysis and ineffective erythropoiesis); decreased bilirubin excretion (eg; obstruction and hepatitis); and abnormal bilirubin metabolism (eg; hereditary and neonatal jaundice). Conjugated (direct) bilirubin is elevated more than unconjugated (indirect) bilirubin in viral hepatitis; drug reactions, alcoholic liver disease conjugated (direct) bilirubin is also elevated more than unconjugated (indirect) bilirubin when there is some kind of blockage of the bile ducts like in Gallstones getting into the bile ducts tumors & Scarring of the bile ducts. Increased unconjugated (indirect) bilirubin may be a result of hemolytic or pernicious anemia, transfusion reaction & a common metabolic condition termed Gilbert syndrome.

AST levels increase in viral hepatitis, blockage of the bile duct ,cirrhosis of the liver, liver cancer, kidney failure, hemolytic anemia, pancreatitis, hemochromatosis. Ast levels may also increase after a heart attack or strenuous activity. ALT is commonly measured as a part of a diagnostic evaluation of hepatocellular injury, to determine liver health. Elevated ALP levels are seen in Biliary Obstruction, Osteoblastic Bone Tumors, Osteomalacia, Hepatitis, Hyperparathyroidism, Leukemia, Lymphoma, page's disease, Rickets, Sarcoidosis etc.

Elevated serum GGT activity can be found in diseases of the liver, Biliary system and pancreas. Conditions that increase serum GGT are obstructive liver disease, high


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| Referred By | : Self | Report Generated On | : 19/Apr/2024 07:13PM | |
| Customer Since | : 19/Apr/2024 | Sample Temperature | : Maintained ✓ | |
| Sample Type | : Serum | Report Status | : Final Report | |

DEPARTMENT OF BIOCHEMISTRY

Healthians 100 Good Health Upgrade Package

| Test Name | Value | Unit | Bio. Ref Interval |
|-----------|-------|------|-------------------|
|-----------|-------|------|-------------------|

alcohol consumption and use of enzyme-including drugs etc.

Serum total protein, also known as total protein, is a biochemical test for measuring the total amount of protein in serum..Protein in the plasma is made up of albumin and globulin. Higher-than-normal levels may be due to: Chronic inflammation or infection, including HIV and hepatitis B or C, Multiple myeloma, Waldenstrom's disease. Lower-than-normal levels may be due to: Agammaglobulinemia, Bleeding (hemorrhage), Burns, Glomerulonephritis, Liver disease, Malabsorption, Malnutrition, Nephrotic - Human serum albumin is the most abundant protein in human blood plasma. It is produced in the liver. Albumin constitutes about half of the blood serum protein. Low blood albumin levels (hypoalbuminemia) can be caused by: Liver disease like cirrhosis of the liver, nephrotic syndrome, protein-losing enteropathy, Burns, hemodilution, increased vascular permeability or decreased lymphatic clearance, malnutrition and wasting etc.



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| Referred By | : Self | Report Generated On | : 19/Apr/2024 07:14PM | |
| Customer Since | : 19/Apr/2024 | Sample Temperature | : Maintained ✓ | |
| Sample Type | : SERUM | Report Status | : Final Report | |

DEPARTMENT OF BIOCHEMISTRY

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| Test Name | Value | Unit | Bio. Ref Interval |
|--|-------------|-------|-------------------|
| Iron study | | | |
|  Serum Iron Method: TPTZ | 54.0 | ug/dl | 70 - 180 |
|  UIBC Method: Nitroso-PSAP | 272.00 | ug/dl | 155 - 355 |
|  Serum Total Iron Binding Capacity (TIBC) Method: FE+UIBC (saturation with iron) | 326 | µg/dl | 250 - 400 |
|  Transferrin Saturation % Method: Calculated | 16.56 | % | 10 - 50 |

Iron participates in a variety of vital processes in the body varying from cellular oxidative mechanisms to the transport and delivery of oxygen to body cells. It is a constituent of the oxygen-carrying chromoproteins, haemoglobin and myoglobin, as well as various enzymes, such as cytochrome oxidase and peroxidases.

Serum iron may be increased in hemolytic, megaloblastic and aplastic anemias, and in hemochromatosis acute leukemia, lead poisoning, pyridoxine deficiency, thalassemia, excessive iron therapy, and after repeated transfusions. Drugs causing increased serum iron include chloramphenicol, cisplatin, estrogens (including oral contraceptives), ethanol, iron dextran, and methotrexate. Iron can be decreased in iron-deficiency anemia, acute and chronic infections, carcinoma, nephrotic syndrome hypothyroidism, in protein- calorie malnutrition and after surgery. Diurnal variation is seen in serum iron levels with normal values obtained in the midmorning, low values in midafternoon and very low values near midnight.

TIBC measures the blood's capacity to bind iron with transferrin (TRF). Estrogens and oral contraceptives increase TIBC levels. Asparaginase, chloramphenicol, corticotropin, cortisone, and testosterone decrease the TIBC levels.

Transferrin is the primary plasma iron transport protein, which binds iron strongly at physiological pH. Transferrin is generally only 25% to 30% saturated with iron. The additional amount of iron that can be bound is the unsaturated iron-binding capacity (UIBC). Transferrin saturation represents the number of iron-binding sites that are occupied. It is a better index of iron stores than serum iron alone. Transferrin saturation is decreased in iron deficiency anemia (usually <10% in established deficiency).



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Office No. 1 on Ground Floor, Ascot Center, Next to Hilton Hotel, Sahar Road, Andheri(E), Mumbai, Maharashtra, Pincode - 400099 (NABL Accreditation Certificate Number MC-5949)

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| Test Name | Value | Unit | Bio. Ref Interval |
|--|-------|---------------------------|-------------------|
| Kidney Function Test1 (KFT1) | | | |
| Serum Creatinine Method: Jaffes Kinetic | 0.92 | mg/dl | 0.7 - 1.3 |
| GFR, ESTIMATED Method: Calculated | 84.62 | mL/min/1.73m ² | |
| Serum Uric Acid Method: Uricase | 6.7 | mg/dl | 3.5-7.2 |
| Serum Calcium Method: Arsenazo III | 9.3 | mg/dl | 8.8 - 10.6 |
| Serum Phosphorus Method: Phosphomolybdate complex | 3.6 | mg/dl | 2.5 - 4.5 |
| Serum Sodium Method: ISE (Indirect) | 141 | mmol/L | 136 - 146 |
| Serum Chloride Method: ISE (Indirect) | 103 | mmol/L | 101 - 109 |
| Blood Urea Method: Urease | 47 | mg/dl | 17 - 43 |
| Blood Urea Nitrogen (BUN) Method: Calculated | 22.0 | mg/dl | 8-20 |
| Bun/Creatinine Ratio Method: Calculated | 23.90 | Ratio | |
| Urea/Creatinine Ratio Method: Calculated | 51.15 | Ratio | |

The kidneys play a vital role in the excretion of waste products and toxins such as urea, creatinine and uric acid, regulation of extracellular fluid volume, serum osmolality and electrolyte concentrations, as well as the production of hormones like erythropoietin and 1,25 dihydroxy vitamin D and renin. Assessment of renal function is important in the management of patients with kidney disease or pathologies affecting renal function. Tests of renal function have utility in identifying the presence of renal disease, monitoring the response of kidneys to treatment, and determining the progression of renal disease.

Urea is synthesized in the liver as the final product of protein and amino acid metabolism. Urea synthesis is therefore dependent on daily protein intake and endogenous protein metabolism.

Creatinine is a metabolic product of creatine and phosphocreatine, which are both found almost exclusively in muscle.

Uric Acid is the major product of purine catabolism in humans. Uric acid levels are used to monitor the treatment of gout.

Measurement of calcium is used in the diagnosis and treatment of parathyroid disease, a variety of bone diseases, chronic renal disease, urolithiasis and tetany.

Phosphorus levels are increased in acute or chronic renal failure with decreased GFR .

Sodium is an electrolyte, and it helps regulate the amount of water in and around the cells & the balance of chemicals in the body called acids and bases.

Chloride is a negatively charged ion that works with other electrolytes such as potassium, sodium, and bicarbonate, to help regulate the amount of fluid in the body and maintain the acid-base balance.

Note: Kindly note change in reference range with effect from 17/08/2023.



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SIN No:E1107250

| | | | | |
|----------------|-------------------------|---------------------|-----------------------|---|
| Patient Name | : Sharadchandra V Tilay | Barcode | : E1107250 |  |
| Age/Gender | : 79Y OM OD /Male | Sample Collected On | : 19/Apr/2024 08:55AM | |
| Order Id | : 10575199498 | Sample Received On | : 19/Apr/2024 05:43PM | |
| Referred By | : Self | Report Generated On | : 19/Apr/2024 07:12PM | |
| Customer Since | : 19/Apr/2024 | Sample Temperature | : Maintained ✓ | |
| Sample Type | : SERUM | Report Status | : Final Report | |

DEPARTMENT OF BIOCHEMISTRY

Healthians 100 Good Health Upgrade Package

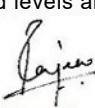
| Test Name | Value | Unit | Bio. Ref Interval |
|--|--------|-------|--|
| Lipid Profile Basic | | | |
|  Total Cholesterol Method: Cholesterol Oxidase, Esterase, Peroxidase | 153.4 | mg/dl | Desirable : <200 Borderline: 200-239 High : >=240 |
|  Serum Triglycerides Method: Enzymatic | 75.7 | mg/dl | Desirable : <150 Borderline high : 150-199 High : 200-499 Very high : >= 500 |
|  Serum HDL Cholesterol Method: Direct measure, immunoinhibition | 25.7 | mg/dl | 40 - 60 |
| LDL Cholesterol Calculated Method: Calculated | 112.56 | mg/dl | Optimal : <100 near /above Optimal:100 - 129 Borderline High: 130- 159 High : 160 - 189 Very High :>=190 |
| VLDL Cholesterol Calculated Method: Calculated | 15.14 | mg/dl | <30 |
|  Total CHOL / HDL Cholesterol Ratio Method: Calculated | 5.97 | Ratio | 3.30 - 4.40 |
| LDL / HDL Cholesterol Ratio Method: Calculated | 4.38 | Ratio | Desirable/Low Risk: 0.5-3.0 Line/Moderate Risk: 3.0-6.0 Elevated/High Risk: >6.0 |
| HDL / LDL Cholesterol Ratio Method: Calculated | 0.23 | Ratio | Optimal->0.4 Moderate-0.4 to 0.3 High-<0.3 |
|  Non-HDL Cholesterol Method: Calculated | 127.7 | mg/dl | 0.0 - 160.0 |

Dyslipidemia is a disorder of fat or lipoprotein metabolism in the body and includes lipoprotein overproduction or deficiency. Dyslipidemias means increase in the level of one or more of the following: Total Cholesterol, low density lipoprotein (LDL) and/or triglyceride concentrations.

Dyslipidemia also includes a decrease in the "good" cholesterol or high-density lipoprotein (HDL) concentration in the blood. Cholesterol is a steroid carried in the bloodstream as lipoprotein, necessary for cell membrane functioning and as a precursor to bile acids, progesterone, vitamin D, estrogens, glucocorticoids and mineralocorticoids.

HDL is termed "good cholesterol" because its levels are inversely related to the risk of Coronary heart disease.

LDL cholesterol is termed the "bad cholesterol" and their increased levels are associated with increased risk of atherosclerosis and coronary


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| Age/Gender | : 79Y OM OD /Male | Sample Collected On | : 19/Apr/2024 08:55AM | |
| Order Id | : 10575199498 | Sample Received On | : 19/Apr/2024 05:43PM | |
| Referred By | : Self | Report Generated On | : 19/Apr/2024 07:12PM | |
| Customer Since | : 19/Apr/2024 | Sample Temperature | : Maintained ✓ | |
| Sample Type | : SERUM | Report Status | : Final Report | |

DEPARTMENT OF BIOCHEMISTRY

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| Test Name | Value | Unit | Bio. Ref Interval |
|-----------|-------|------|-------------------|
|-----------|-------|------|-------------------|

heart disease.

Lipid level assessments must be made following 9 to 12 hours of fasting, otherwise assay results might lead to erroneous interpretation. Healthians labs report biological reference intervals (normal ranges) in accordance with the recommendations of The National Cholesterol Education Program (NCEP) & Adult Treatment Panel IV (ATP IV) guidelines providing the most desirable targets of various circulating lipid fractions in the blood. NCEP recommends that all adults above 20 years of age must be screened for abnormal lipid levels.



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| | | | | |
|----------------|-------------------------|---------------------|-----------------------|---|
| Patient Name | : Sharadchandra V Tilay | Barcode | : E1107250 |  |
| Age/Gender | : 79Y OM OD /Male | Sample Collected On | : 19/Apr/2024 08:55AM | |
| Order Id | : 10575199498 | Sample Received On | : 19/Apr/2024 06:37PM | |
| Referred By | : Self | Report Generated On | : 19/Apr/2024 08:43PM | |
| Customer Since | : 19/Apr/2024 | Sample Temperature | : Maintained ✓ | |
| Sample Type | : URINE | Report Status | : Final Report | |

DEPARTMENT OF CLINICAL PATHOLOGY

Healthians 100 Good Health Upgrade Package

| Test Name | Value | Unit | Bio. Ref Interval |
|-----------|-------|------|-------------------|
|-----------|-------|------|-------------------|

Urine Routine & Microscopy Extended

PHYSICAL EXAMINATION

| | | |
|--|---------------|-------------|
|  Colour Method: Visual | Pale Yellow | Pale Yellow |
|  Volume Method: Visual | 20.00 | mL |
|  Appearance Method: Visual | Slightly Hazy | Clear |

CHEMICAL EXAMINATION

| | | |
|--|-------------|---------------|
|  Specific Gravity Method: Dipstick-Ion exchange | 1.020 | 1.001 - 1.035 |
|  pH Method: Dipstick-Double indicator | 6.0 | 4.5 - 7.5 |
|  Glucose Method: Dipstick-oxidase peroxidase | Negative | Negative |
|  Urine Protein Method: Dipstick-Bromophenol blue | Present (+) | Negative |

Result rechecked with manual method.

| | | |
|--|----------|----------|
|  Ketones Method: Sodium nitroprusside | Negative | Negative |
|  Urobilinogen Method: Dipstick-Ehrlichs Test | Normal | Normal |
|  Bilirubin Method: Dipstick-Ehrlichs Test | Negative | Negative |

Result rechecked with manual method.

| | | |
|--|----------|----------|
|  Nitrite Method: Dipstick-Griess test | Negative | Negative |
|  Blood Method: Dipstick-Peroxidase | Negative | Negative |
|  Leucocyte Esterase Method: Dipstick- Esterase | Negative | Negative |


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SIN No: E1107250

Patient Name : Sharadchandra V Tilay
 Age/Gender : 79Y OM OD /Male
 Order Id : 10575199498
 Referred By : Self
 Customer Since : 19/Apr/2024
 Sample Type : URINE

Barcode : E1107250 
 Sample Collected On : 19/Apr/2024 08:55AM
 Sample Received On : 19/Apr/2024 06:37PM
 Report Generated On : 19/Apr/2024 08:43PM
 Sample Temperature : Maintained ✓
 Report Status : Final Report

DEPARTMENT OF CLINICAL PATHOLOGY

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| Test Name | Value | Unit | Bio. Ref Interval |
|--|--------|------|-------------------|
| MICROSCOPIC EXAMINATION | | | |
|  Pus Cells Method: Microscopic Examination | 2-3 | /HPF | 0 - 5 |
|  Epithelial cells Method: Microscopic Examination | 1-2 | /HPF | 0 - 5 |
|  RBCs Method: Microscopic Examination | Nil | /HPF | Nil |
|  Casts Method: Microscopic Examination | Nil | | Nil |
|  Crystals Method: Microscopic Examination | Nil | | Nil |
|  Bacteria Method: Microscopic Examination | Absent | | Absent |
|  Yeast Cell | Nil | | |
|  Others (Non Specific) Method: Microscopic Examination | Nil | | |


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| | | | | |
|----------------|-------------------------|---------------------|-----------------------|---|
| Patient Name | : Sharadchandra V Tilay | Barcode | : E1107250 |  |
| Age/Gender | : 79Y OM OD /Male | Sample Collected On | : 19/Apr/2024 08:55AM | |
| Order Id | : 10575199498 | Sample Received On | : 19/Apr/2024 05:45PM | |
| Referred By | : Self | Report Generated On | : 19/Apr/2024 07:55PM | |
| Customer Since | : 19/Apr/2024 | Sample Temperature | : Maintained ✓ | |
| Sample Type | : Whole Blood EDTA | Report Status | : Final Report | |

DEPARTMENT OF HAEMATOLOGY

| Test Name | Value | Unit | Bio. Ref Interval |
|-----------|-------|------|-------------------|
|-----------|-------|------|-------------------|

ERYTHROCYTE SEDIMENTATION RATE (ESR)

 ESR

7

mm/1st hour

0-30

Method: Modified Westergren Method

ESR is a non-specific phenomenon, its measurement is clinically useful in disorders associated with an increased production of acute-phase proteins. It provides an index of progress of the disease in rheumatoid arthritis or tuberculosis, and it is of considerable value in diagnosis of temporal arteritis and polymyalgia rheumatica. It is often used if multiple myeloma is suspected, but when the myeloma is non-secretory or light chain, a normal ESR does not exclude this diagnosis.

An elevated ESR occurs as an early feature in myocardial infarction. Although a normal ESR cannot be taken to exclude the presence of organic disease, the vast majority of acute or chronic infections and most neoplastic and degenerative diseases are associated with changes in the plasma proteins that increased ES values.

An increased ESR in subjects who are HIV seropositive seems to be an early predictive marker of progression toward acquired immune deficiency syndrome (AIDS).

The ESR is influenced by age, stage of the menstrual cycle and medications taken (corticosteroids, contraceptive pills). It is especially low (0–1 mm) in polycythaemia, hypofibrinogenaemia and congestive cardiac failure and when there are abnormalities of the red cells such as poikilocytosis, spherocytosis, or sickle cells.

In cases of performance enhancing drug intake by athletes the ESR values are generally lower than the usual value for the individual and as a result of the increase in haemoglobin (i.e. the effect of secondary polycythaemia).



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Patient Name : Sharadchandra V Tilay
 Age/Gender : 79Y OM OD /Male
 Order Id : 10575199498
 Referred By : Self
 Customer Since : 19/Apr/2024
 Sample Type : WHOLE BLOOD EDTA

Barcode : E1107250 
 Sample Collected On : 19/Apr/2024 08:55AM
 Sample Received On : 19/Apr/2024 05:45PM
 Report Generated On : 19/Apr/2024 07:47PM
 Sample Temperature : Maintained ✓
 Report Status : Final Report

DEPARTMENT OF HAEMATOLOGY

Healthians 100 Good Health Upgrade Package

| Test Name | Value | Unit | Bio. Ref Interval |
|-----------|-------|------|-------------------|
|-----------|-------|------|-------------------|

Complete Blood Count

| | | | |
|--|--------|---------------------|------------|
|  Haemoglobin (HB) Method: Photometric Measurement | 13.4 | g/dL | 13.0-17.0 |
|  Total Leucocyte Count (TLC) Method: Coulter Principle | 11.2 | 10 ³ /uL | 4.0-10.0 |
|  Hematocrit (PCV) Method: Calculated | 41.3 | % | 40.0-50.0 |
|  Red Blood Cell Count (RBC) Method: Coulter Principle | 4.60 | 10 ⁶ /µl | 4.50-5.50 |
|  Mean Corp Volume (MCV) Method: Derived from RBC Histogram | 88.8 | fL | 83.0-101.0 |
|  Mean Corp Hb (MCH) Method: Calculated | 28.8 | pg | 27.0-32.0 |
|  Mean Corp Hb Conc (MCHC) Method: Calculated | 32.4 | g/dL | 31.5-34.5 |
|  RDW - CV Method: Derived from RBC Histogram | 17.1 | % | 11.6-14.0 |
|  RDW - SD Method: Derived from RBC Histogram | 53.80 | fL | 39.0-46.0 |
|  Mentzer Index Method: Calculated | 19.30 | Ratio | |
|  RDWI Method: Calculated | 330.10 | Ratio | |
|  Green and king index Method: Calculated | 101 | Ratio | |

Differential Leucocyte Count

| | | | |
|--|------|---|---------|
|  Neutrophils Method: VCSn Technology | 72.2 | % | 40 - 80 |
|  Lymphocytes Method: VCS Technology | 19.7 | % | 20-40 |
|  Monocytes Method: VCS Technology | 6.4 | % | 02 - 10 |
|  Eosinophils Method: VCS Technology | 0.9 | % | 01 - 06 |


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| Referred By | : Self | Report Generated On | : 19/Apr/2024 07:47PM | |
| Customer Since | : 19/Apr/2024 | Sample Temperature | : Maintained ✓ | |
| Sample Type | : WHOLE BLOOD EDTA | Report Status | : Final Report | |

DEPARTMENT OF HAEMATOLOGY

Healthians 100 Good Health Upgrade Package

| Test Name | Value | Unit | Bio. Ref Interval |
|--|-------------|---------------------|-------------------|
|  Basophils MC-5949 | 0.8 | % | 00 - 02 |
| Method: VCS Technology | | | |
| Absolute Leucocyte Count | | | |
|  Absolute Neutrophil Count (ANC) MC-5949 | 8.09 | 10 ³ /uL | 2.0-7.0 |
| Method: Calculated | | | |
|  Absolute Lymphocyte Count (ALC) MC-5949 | 2.21 | 10 ³ /uL | 1.0-3.0 |
| Method: Calculated | | | |
|  Absolute Monocyte Count MC-5949 | 0.72 | 10 ³ /uL | 0.2-1.0 |
| Method: Calculated | | | |
|  Absolute Eosinophil Count (AEC) MC-5949 | 0.1 | 10 ³ /uL | 0.02-0.5 |
| Method: Calculated | | | |
|  Absolute Basophil Count MC-5949 | 0.09 | 10 ³ /uL | 0.02 - 0.10 |
| Method: Calculated | | | |
|  Platelet Count(PLT) MC-5949 | 225 | 10 ³ /µl | 150-410 |
| Method: Coulter Principle | | | |
|  MPV MC-5949 | 8.5 | fL | 7 - 9 |
| Method: Derived from PLT Histogram | | | |

The International Council for Standardization in Haematology (ICSH) recommends reporting of absolute counts of various WBC subsets for clinical decision making. This test has been performed on a fully automated 5 part differential cell counter which counts over 10,000 WBCs to derive differential counts. A complete blood count is a blood panel that gives information about the cells in a patient's blood, such as the cell count for each cell type and the concentrations of Hemoglobin and platelets. The cells that circulate in the bloodstream are generally divided into three types: white blood cells (leukocytes), red blood cells (erythrocytes), and platelets (thrombocytes). Abnormally high or low counts may be physiological or may indicate disease conditions, and hence need to be interpreted clinically.

The Mentzer index is used to differentiate iron deficiency anaemia beta thalassemia trait. If a CBC indicates microcytic anaemia, these are two of the most likely causes, making it necessary to distinguish between them.

If the quotient of the mean corpuscular volume divided by the red blood cell count is then 13, thalassemia is more likely. If the result is greater than 13, then iron-deficiency anaemia is more likely.



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| Age/Gender | : 79Y OM OD /Male | Sample Collected On | : 19/Apr/2024 08:55AM | |
| Order Id | : 10575199498 | Sample Received On | : 19/Apr/2024 05:43PM | |
| Referred By | : Self | Report Generated On | : 19/Apr/2024 07:21PM | |
| Customer Since | : 19/Apr/2024 | Sample Temperature | : Maintained ✓ | |
| Sample Type | : Serum | Report Status | : Final Report | |

DEPARTMENT OF IMMUNOLOGY

Healthians 100 Good Health Upgrade Package

| Test Name | Value | Unit | Bio. Ref Interval |
|-----------|-------|------|-------------------|
|-----------|-------|------|-------------------|

Ferritin

 Ferritin
Method: CLIA

106.1 ng/ml

23.9-336.2

Ferritin estimation is useful in the diagnosis of iron deficiency anemia and iron overload.

Elevated ferritin levels also are observed in acute and chronic liver disease, chronic renal failure and in some types of neoplastic disease.

Increased levels seen in hemochromatosis, frequent blood transfusions with packed RBCs and alcoholic liver disease. Decreased levels seen in heavy menstrual bleeding, poor absorption of iron, iron deficiency anaemia and long term GI bleed.

Ferritin is an acute phase reactant and thus may be increased with inflammation, chronic infection, liver disease, auto-immune disorders and some type of cancers. Ferritin is not used to detect or monitor these conditions.


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| | | | | |
|----------------|-------------------------|---------------------|-----------------------|---|
| Patient Name | : Sharadchandra V Tilay | Barcode | : E1107250 |  |
| Age/Gender | : 79Y OM OD /Male | Sample Collected On | : 19/Apr/2024 08:55AM | |
| Order Id | : 10575199498 | Sample Received On | : 19/Apr/2024 05:43PM | |
| Referred By | : Self | Report Generated On | : 19/Apr/2024 08:16PM | |
| Customer Since | : 19/Apr/2024 | Sample Temperature | : Maintained ✓ | |
| Sample Type | : Serum | Report Status | : Final Report | |

DEPARTMENT OF IMMUNOLOGY

| Test Name | Value | Unit | Bio. Ref Interval |
|-----------|-------|------|-------------------|
|-----------|-------|------|-------------------|

PSA Total (Prostatic Specific Antigen, Total)

 PROSTATIC SPECIFIC ANTIGEN (PSA)
TOTAL

9.70

ng/mL

0 - 4

Method: CLIA

RESULT RECHECKED

KINDLY CORRELATE CLINICALLY

The prostate-specific antigen (PSA) test is done to screen men for prostate cancer. Since other common medical conditions, such as benign prostatic hyperplasia (BPH) and prostatitis, can cause high PSA levels, a prostate biopsy may be done if your doctor is concerned about signs of prostate cancer.

Other clinical applications have been clearly demonstrated for PSA. When employed for the management of prostate cancer patients, serial measurement of PSA is useful in detecting residual tumor and recurrent cancer after radical prostatectomy. Moreover, PSA may serve as an accurate marker for monitoring advancing clinical stage in untreated patients, as well as assessing response to therapy. Therefore, serial measurement of PSA concentrations can be an important tool in monitoring patients with prostate cancer and in determining the potential and actual effectiveness of surgery or other therapies. Other biochemical markers such as prostatic acid phosphatase (PAP) and carcinoembryonic antigen (CEA) lack sufficient specificity for monitoring disease, and are unsuited for detecting early stage prostate cancer.

ADV:- Free PSA level to rule out cancer prostate


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|----------------|---|-----------------------|---------------------|---|--|---|
| Patient Name | : | Sharadchandra V Tilay | Barcode | : | E1107250 |  |
| Age/Gender | : | 79Y OM OD /Male | Sample Collected On | : | 19/Apr/2024 08:55AM | |
| Order Id | : | 10575199498 | Sample Received On | : | 19/Apr/2024 05:43PM | |
| Referred By | : | Self | Report Generated On | : | 19/Apr/2024 07:21PM | |
| Customer Since | : | 19/Apr/2024 | Sample Temperature | : | Maintained  | |
| Sample Type | : | SERUM | Report Status | : | Final Report | |

DEPARTMENT OF IMMUNOLOGY

Healthians 100 Good Health Upgrade Package

| Test Name | Value | Unit | Bio. Ref Interval |
|-----------|-------|------|-------------------|
|-----------|-------|------|-------------------|

Immunoglobulin - IgE Total - Serum

IMMUNOGLOBULIN E (IgE) TOTAL

124.52

IU/mL

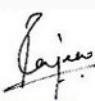
0 -160

Method: Immunoturbidometry

IgE mediates allergic and hypersensitivity reactions. There is a significant overlap in total IgE between allergic and non-allergic individuals.

IgE is increased in Atopic diseases -Exogenous asthma in approximately 60% of patients, Hay fever in approximately 30% of patients, Atopic eczema; Parasitic diseases (e.g., ascariasis, visceral larva migrans, hookworm disease, schistosomiasis, Echinococcus infestation); Monoclonal IgE myeloma.

IgE is decreased in Hereditary deficiencies and Acquired immunodeficiency. A normal level of IgE in serum does not eliminate the possibility of allergic disease.



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SIN No:E1107250

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|----------------|-------------------------|---------------------|-----------------------|---|
| Patient Name | : Sharadchandra V Tilay | Barcode | : E1107250 |  |
| Age/Gender | : 79Y OM OD /Male | Sample Collected On | : 19/Apr/2024 08:55AM | |
| Order Id | : 10575199498 | Sample Received On | : 19/Apr/2024 05:43PM | |
| Referred By | : Self | Report Generated On | : 19/Apr/2024 08:48PM | |
| Customer Since | : 19/Apr/2024 | Sample Temperature | : Maintained ✓ | |
| Sample Type | : Serum | Report Status | : Final Report | |

DEPARTMENT OF IMMUNOLOGY

Healthians 100 Good Health Upgrade Package

| Test Name | Value | Unit | Bio. Ref Interval |
|---|-------------|-------|--------------------------------------|
| CEA (Carcino Embryonic Antigen)  CARCINO EMBRYONIC ANTIGEN (CEA) Method: CLIA | 5.19 | ng/mL | Non smokers < 3.00 Smokers < 5.00 |

RESULT RECHECKED

High levels of CEA can be seen in other conditions :

- Breast cysts
- Chronic obstructive pulmonary disease, which is a breathing disorder
- Mucinous cystadenoma of the ovary or appendix
- Infections such as cholecystitis and diverticulitis
- Inflammatory bowel disease, which causes diarrhea, pain, weight loss
- Liver disease
- Lung problems
- Ulcers
- Pancreatitis

TO BE CORRELATED CLINICALLY OR REPEAT WITH FRESH SAMPLE IF REQUIRED

CEA is a glycoprotein normally produced during early fetal life and rapid multiplication of epithelial cells especially those of the digestive system. CEA also appears in blood of chronic smokers.

Use-

- Monitoring colorectal cancer and selected other cancers such as medullary thyroid carcinoma, cancers of the rectum, lung, pancreas, stomach, and ovaries.
- May be useful in assessing the effectiveness of chemotherapy or radiation treatment
- Diagnosis of malignant pleural effusion


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| | | | | | | |
|----------------|---|-----------------------|---------------------|---|---------------------|---|
| Patient Name | : | Sharadchandra V Tilay | Barcode | : | E1107250 |  |
| Age/Gender | : | 79Y OM OD /Male | Sample Collected On | : | 19/Apr/2024 08:55AM | |
| Order Id | : | 10575199498 | Sample Received On | : | 19/Apr/2024 05:43PM | |
| Referred By | : | Self | Report Generated On | : | 19/Apr/2024 08:48PM | |
| Customer Since | : | 19/Apr/2024 | Sample Temperature | : | Maintained ✓ | |
| Sample Type | : | Serum | Report Status | : | Final Report | |

DEPARTMENT OF IMMUNOLOGY

Healthians 100 Good Health Upgrade Package

| Test Name | Value | Unit | Bio. Ref Interval |
|-----------|-------|------|-------------------|
|-----------|-------|------|-------------------|

| Disease | Percentage positivity of CEA |
|----------------------|------------------------------|
| Colorectal carcinoma | 75 |
| Gastric cancer | 75 |
| Pancreas | 75 |
| Lung | 75 |
| Breast | 50 |
| Ovary | 50 |
| Head and neck cancer | 50 |

Note: Not useful in screening general population for undetected cancers

CEA values obtained by different methods and on different instruments cannot be used interchangeably during monitoring a patient as the values vary due to differences in assay methodology and reagent specificity.



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|----------------|---|-----------------------|---------------------|---|---------------------|---|
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| Age/Gender | : | 79Y OM OD /Male | Sample Collected On | : | 19/Apr/2024 08:55AM | |
| Order Id | : | 10575199498 | Sample Received On | : | 19/Apr/2024 05:43PM | |
| Referred By | : | Self | Report Generated On | : | 19/Apr/2024 08:42PM | |
| Customer Since | : | 19/Apr/2024 | Sample Temperature | : | Maintained ✓ | |
| Sample Type | : | Serum | Report Status | : | Final Report | |

DEPARTMENT OF IMMUNOLOGY

Healthians 100 Good Health Upgrade Package

| Test Name | Value | Unit | Bio. Ref Interval |
|---------------------|-------------|--------|-------------------|
| Homocysteine | 27.6 | µmol/L | 6 - 17 |

Clinical Significance

Homocysteine is linked to increased risk of premature coronary artery disease, stroke and Thromboembolism and additionally alzheimer's disease, Osteoporosis, Venous Thrombosis, schizophrenia, Cognitive Deficiency and pregnancy complications.

High Values

Elevated Homocysteine may be due to increasing age, genetic traits, drugs, Renal dysfunction, and dietary deficiency of vitamins or smoking. To lower your Homocysteine, eat more green vegetables, stop smoking, Alcohol. Folic Acid helps lowering elevated levels.

Caution while interpretation

To get most accurate results, it is mandatory to separate serum immediately. In separated serum, Homocysteine remains stable for at least 48 hours at room temperature.



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SIN No:E1107250

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|----------------|-------------------------|---------------------|-----------------------|---|
| Patient Name | : Sharadchandra V Tilay | Barcode | : E1107250 |  |
| Age/Gender | : 79Y OM OD /Male | Sample Collected On | : 19/Apr/2024 08:55AM | |
| Order Id | : 10575199498 | Sample Received On | : 19/Apr/2024 05:43PM | |
| Referred By | : Self | Report Generated On | : 19/Apr/2024 07:21PM | |
| Customer Since | : 19/Apr/2024 | Sample Temperature | : Maintained ✓ | |
| Sample Type | : Serum | Report Status | : Final Report | |

DEPARTMENT OF IMMUNOLOGY

Healthians 100 Good Health Upgrade Package

| Test Name | Value | Unit | Bio. Ref Interval |
|-----------|-------|------|-------------------|
|-----------|-------|------|-------------------|

Folate (Folic Acid)

 FOLIC ACID / FOLATE - SERUM
Method: CLIA

6.80

ng/mL

> 6.5

Folate is an essential vitamin vital to normal cell growth and DNA synthesis. It is absorbed by the small intestine and stored in the liver. Folate levels in both serum and RBCs are used to assess folate status. The serum folate level is an indicator of recent folate intake. RBC folate is the best indicator of long-term folate stores. A low RBC folate value may indicate a prolonged folate deficiency. Folate levels are decreased in insufficient dietary intake, megaloblastic anaemia, alcoholism, malnutrition, liver disease, Vitamin B12 deficiency, pregnancy, celiac disease, chronic hemodialysis. normal levels may be seen in patients with macrocytic anemia, dementia, neuropsychiatric disorders, and pregnancy disorders. To distinguish between vitamin B12 and folate deficiency, determination of homocysteine (HCS) and methylmalonic acid (MMA) are useful. In vitamin B12 deficiency, both HCS and MMA are elevated, whereas in folate deficiency, only HCS levels are elevated.


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| Order Id | : 10575199498 | Sample Received On | : 19/Apr/2024 05:43PM | |
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| Customer Since | : 19/Apr/2024 | Sample Temperature | : Maintained ✓ | |
| Sample Type | : Serum | Report Status | : Final Report | |

DEPARTMENT OF IMMUNOLOGY

Healthians 100 Good Health Upgrade Package

| Test Name | Value | Unit | Bio. Ref Interval |
|-----------|-------|------|-------------------|
|-----------|-------|------|-------------------|

Vitamin B12

 **VITAMIN B12**
Method: CLIA

564 pg/ml

211 - 912

Vitamin B12 is a coenzyme that is involved in two very important metabolic functions vital to normal cell growth and DNA synthesis: 1) the synthesis of methionine, and 2) the conversion of methylmalonyl CoA to succinyl CoA. Deficiency of this vitamin can lead to megaloblastic anemia and ultimately to severe neurological problems. Also causes macrocytic anemia, glossitis, peripheral neuropathy, weakness, hyperreflexia, ataxia, loss of proprioception, poor coordination, and affective behavioral changes. A significant increase in RBC MCV may be an important indicator of vitamin B12 deficiency.

Patients taking vitamin B12 supplementation may have misleading results. A normal serum concentration of B12 does not rule out tissue deficiency of vitamin B12. The most sensitive test for B12 deficiency at the cellular level is the assay for MMA. If clinical symptoms suggest deficiency, measurement of MMA and homocysteine should be considered, even if serum B12 concentrations are normal.

Vitamin D, 25-Hydroxy

 **VITAMIN D (25 - OH VITAMIN D)**
Method: CLIA

33.48 ng/ml

30 - 100

| VITAMIN D STATUS | VITAMIN D 25 HYDROXY (ng/mL) |
|------------------|------------------------------|
| DEFICIENCY | <20 |
| INSUFFICIENCY | 20 - <30 |
| SUFFICIENCY | 30 - 100 |
| TOXICITY | >100 |

Vitamin D is a lipid-soluble steroid hormone that is produced in the skin through the action of sunlight or is obtained from dietary sources. The role of vitamin D in maintaining homeostasis of calcium and phosphorus is well established.

The assay measures both D2 (Ergocalciferol) and D3 (Cholecalciferol) metabolites of vitamin D. Vitamin D status is best determined by measurement of 25 hydroxy vitamin D, as it is the major circulating form and has longer half life (2-3 weeks) than 1,25 Dihydroxy vitamin D (5-8 hrs).

The reference ranges discussed in the preceding are related to total 25-OHD; as long as the combined total is 30 ng/mL or more, the patient has sufficient vitamin D. Levels needed to prevent rickets and osteomalacia (15 ng/mL) are lower than those that dramatically suppress parathyroid hormone levels (20-30 ng/mL). In turn, those levels are lower than levels needed to optimize intestinal calcium absorption (34 ng/mL). Neuromuscular peak performance is associated with levels approximately 38 ng/mL.


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CONSULTANT PATHOLOGIST



SIN No:E1107250

Healthians Labs (A Unit of Expedient Healthcare Marketing Pvt. Ltd.)

Office No. 1 on Ground Floor, Ascot Center, Next to Hilton Hotel, Sahar Road, Andheri(E), Mumbai, Maharashtra, Pincode - 400099 (NABL Accreditation Certificate Number MC-5949)

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| Customer Since | : 19/Apr/2024 | Sample Temperature | : Maintained ✓ | |
| Sample Type | : Serum | Report Status | : Final Report | |

DEPARTMENT OF IMMUNOLOGY

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| Test Name | Value | Unit | Bio. Ref Interval |
|---|-------|------|-------------------|
| CA 19.9 (Cancer Antigen 19.9)- Pancreatic Cancer | 11.50 | U/mL | < 37 |



Method: CLIA

CA-19.9 is a useful Tumour Marker especially for already diagnosed PANCREATIC ADENOCARCINOMAS, and abdominal malignancies. Baseline levels measured prior to therapeutic intervention, and followed later by serial periodical measurements, will enable the treating doctor to predict outcome of the therapy. They also help in early discovery of recurrences, relapses and metastases.

In general, Tumour Marker levels are directly related to the tumour mass and the stage of the cancer. However it is the rate of change of the Tumour Marker level which is more important, rather than its absolute value. A 50% change can be considered clinically significant. As with other Tumour Markers, CA-19.9 should not be used alone, but in conjunction with other clinical criteria. Combined use of CA-19.9 and CEA increases sensitivity, specificity and predictability of Tumour Markers in PANCREATIC ADENOCARCINOMA. It must be emphasised that CA-19.9 may also be elevated in HEPATOMA, cancers of the STOMACH, BILIARY DUCT, COLON, LUNGS, BREAST, and some non-malignant conditions especially LIVER NECROSIS. Therefore, it should never be used as a screening test for diagnosing Pancreatic Adenocarcinoma, but only as an aid in follow-up studies.



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DEPARTMENT OF IMMUNOLOGY

Healthians 100 Good Health Upgrade Package

| Test Name | Value | Unit | Bio. Ref Interval |
|-----------|-------|------|-------------------|
|-----------|-------|------|-------------------|

Thyroid Profile (Total T3,T4, TSH)

 Tri-Iodothyronine (T3, Total)

Method: CLIA

0.84 ng/ml

0.60-1.81

 Thyroxine (T4, Total)

Method: CLIA

5.40 ug/dl

3.2-12.6

 Thyroid Stimulating Hormone (TSH)-Ultrasensitive

5.8580

μIU/ml

0.55-4.78

Method: CLIA

Test Interpretation:-

The reference ranges for TSH are different during pregnancy and are as follows.

| Pregnancy interval | Bio Ref Range for TSH in uIU/ml (As per American Thyroid Association) |
|--------------------|---|
| First trimester | 0.1 - 2.5 |
| Second trimester | 0.2 - 3.0 |
| Third trimester | 0.3 - 3.0 |

Serum TSH is evaluated in Neonates to diagnose Congenital Hypothyroidism. Within hours of birth, plasma TSH, T4, and T3 concentrations rise rapidly. By 2 to 3 days, TSH conc. fall, while T4 falls to adult conc. by 1 to 2 months of age.

Healthians recommends that the following potential sources of variation should be considered while interpreting thyroid hormone results:

1. Thyroid hormones undergo rhythmic variation within the body this is called circadian variation in TSH secretion: Peak levels are seen between 2-4 am. Minimum levels seen between 6-10 am. This variation may be as much as 50% thus, influence of sampling time needs to be considered for clinical interpretation.
2. Circulating forms of T3 and T4 are mostly reversibly bound with Thyroxine binding globulins (TBG), and to a lesser extent with albumin and Thyroid binding Pre-Albumin. Thus the conditions in which TBG and protein levels alter such as chronic liver disorders, pregnancy, excess of estrogens, androgens, anabolic steroids and glucocorticoids may cause misleading total T3, total T4 and TSH interpretations.
3. Total T3 and T4 levels are seen to have physiological rise during pregnancy and in patients on steroid treatment.
4. T4 may be normal the presence of hyperthyroidism under the following conditions : T3 thyrotoxicosis, Hypoproteinemia related reduced binding, during intake of certain drugs (eg Phenyltoin, Salicylates etc)
5. Neonates and infants have higher levels of T4 due to increased concentration of TBG
6. TSH levels may be normal in central hypothyroidism, recent rapid correction of hypothyroidism or hyperthyroidism, pregnancy, phenytoin therapy etc.
7. TSH values of <0.03 uIU/mL must be clinically correlated to evaluate the presence of a rare TSH variant in certain individuals which is undetectable by conventional methods.
8. Presence of Autoimmune disorders may lead to spurious results of thyroid hormones
9. Various drugs can lead to interference in test results.
10. Healthians recommends evaluation of unbound fractions, that is free T3 (fT3) and free T4 (fT4) for clinic-pathologic correlation, as these are the metabolically active forms.



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| Customer Since | : 19/Apr/2024 | Sample Temperature | : Maintained ✓ | |
| Sample Type | : SERUM | Report Status | : Final Report | |

DEPARTMENT OF IMMUNOLOGY

Healthians 100 Good Health Upgrade Package

| Test Name | Value | Unit | Bio. Ref Interval |
|-----------|-------|------|-------------------|
|-----------|-------|------|-------------------|

Alpha Feto Protein (AFP)

 ALPHA FETO PROTEIN (AFP)
Method: CLIA

1.36

ng/ml

0.0 - 9

Used in- Follow-up management of patients undergoing cancer therapy (testicular, and ovarian tumors and HCC).

- Monitoring the rate of AFP clearance from serum after treatment is an indicator of the effectiveness of therapy.
- Conversely, the growth rate of progressive cancer can be monitored by serially measuring serum AFP concentration over time. Post-operative AFP value which fail to return to normal strongly suggest presence of residual tumour.

Note:

False negative/positive results are observed in patients receiving mouse monoclonal antibodies for diagnosis or therapy. The use of AFP as a tumor marker is not recommended in pregnant females.

AFP value regardless of levels should not be interpreted as absolute evidence for the presence/absence of disease.

All values should be correlated with clinical findings and other investigations.

*** End Of Report ***



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Terms & Conditions:

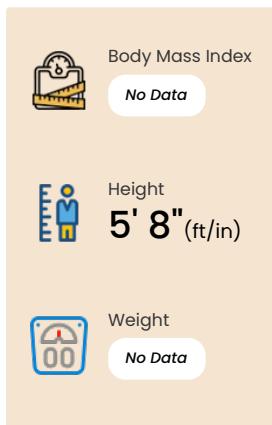
- 1) Machine Data is available for last 7 days only. In case of manual testing & outsourced testing, machine data will not be available.
- 2) CBC parameters may vary when it is manually reviewed by the Pathologists.
- 3) **For Thyroid tests** - Circulating TSH shows a normal circadian rhythm with a peak between 11pm-5am and a nadir between 5pm-8pm. TSH values are also lowered after food when compared to fasting in a statistically significant manner. This variation is of the order of $\pm 50\%$, hence time of day and fasting status have influence on the reported TSH level.
- 4) **For Lipid profile** - Lipid and Lipoprotein concentrations vary during the normal course of daily activity. Also, certain drugs, diet and alcohol can have lasting effects on Triglyceride levels. To obtain best results for Lipid testing, a strict fasting of 10-12 hours with a light meal on the previous night is recommended.
- 5) Test results released pertain to the specimen submitted.
- 6) Test results are dependent on the quality of the sample received by the Lab.
- 7) The tests are carried out in the lab with the presumption that the specimen belongs to the patient named or identified in the bill/test request form/booking ID.
- 8) The reported results are for information and are subject to confirmation and interpretation by the referring doctor to co-relate clinically.
- 9) Test results may show interlaboratory variations.
- 10) Liability of Healthians for deficiency of services or other errors and omissions shall be limited to the fee paid by the patient for the relevant laboratory services.
- 11) This report is not subject to use for any medico-legal purposes.
- 12) Few of the tests might be outsourced to partner labs as and when required.
- 13) This report is not intended to replace but to lead by providing comprehensive information. It is recommended that you consult your doctor/physician for interpretation of results.
- 14) All reports might not be applicable for individuals less than 18, pregnant women or individuals suffering from diseases for which health test has not been performed or symptoms not diagnosed.
- 15) This report is based on preventive health test screening and is meant for a healthy lifestyle. It does not provide any recommendation for life threatening situations.
- 16) It is strongly recommended to take required precautions for allergic reactions or sensitivities.

ADVISORY

Health Advisory

Sharadchandra V Tilay

Booking ID : 10575199498 | Sample Collection Date : 19/Apr/2024


 SUGGESTED
NUTRITION

SUGGESTED NUTRITION

Do's

- Have a balanced diet that includes whole grains, pulses, dairy, fruits, vegetables, nuts and healthy fats
- Take vitamin C rich foods like citrus fruits, strawberries and green, leafy vegetables
- Include nuts like almonds, walnuts and seeds like flaxseeds, sunflower seeds
- Include seeds like flaxseeds, chia seeds, sunflower seeds
- Include fruits like apples, berries and melons in your diet
- Choose low carb veggies like onions, tomatoes, beans, sprouts and green leafy vegetables
- Have high protein, moderate fat diet with low fat milk, yogurt or buttermilk

Dont's

- Avoid red meat and organ meats
- Avoid refined sugars, processed foods and bakery items
- Reduce caffeine intake
- Limit sugar intake
- Limit tea and coffee
- Decrease intake of colas and sugary drinks
- Avoid packaged foods or readymade meats
- Avoid flavoured and seasoned foods
- Avoid saturated fats, trans fats, oily and greasy foods like cakes, creamy or fried foods
- Avoid salty foods and pickles

 SUGGESTED
LIFESTYLE

SUGGESTED LIFESTYLE

Do's

- Stay active and maintain ideal weight
- Lose weight gradually and stay active
- Have regular exposure to sunlight

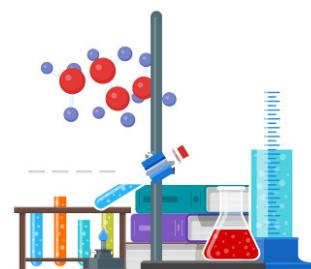
Dont's

- Avoid overworking or being stressed for long time
- Avoid having long gaps in meals or skipping meals
- Avoid smoking and alcohol
- Avoid late night heavy meals
- Avoid strenuous exercises
- Avoid overeating or calorie rich food
- Avoid overexertion without having food or drink
- Avoid long periods of inactivity

 SUGGESTED
FUTURE
TESTS

SUGGESTED FUTURE TESTS

- Vitamin B12 Cyanocobalamin - Every 1 Month
- Vitamin D Total-25 Hydroxy - Every 1 Month
- RA Test Rheumatoid Arthritis Factor, Quantitative - Every 1 Month
- CCP (Antibody Cyclic Citrullinated Peptide) - Every 1 Month
- Culture & Sensitivity, Blood - Every 1 Month
- Complete Hemogram - Every 1 Month
- Glycated Hemoglobin (HbA1c) - Every 3 Month



HEALTH ADVISORY**Suggestions for Health & Well-being**

Sharadchandra V Tilay

Booking ID : 10575199498 | Sample Collection Date : 19/Apr/2024

PHYSICAL ACTIVITY**PHYSICAL ACTIVITY**

Physical activities can vary from Regular walks (Brisk or normal), Jogging , Sports, Stretching, Yoga to light weight lifting etc. It is recommended to partake in physical activity at least 30 minutes a day for 3-4 days a week.

If regular workout is difficult, then we can adapt changes such as using stairs instead of lift/escalators and doing household work!

**STRESS MANAGEMENT****STRESS MANAGEMENT**

Managing stress is an essential part of well-being. Some day to day changes can help such as having sufficient sleep (6-8 hours), indulging yourself in meditation, positive attitude towards lifestyle, using humor, traveling, talking to people whom you feel comfortable with and making time for hobbies by doing what you love to do.

BALANCED DIET**BALANCED DIET**

A balanced diet is the key to healthy lifestyle. Include Whole grains, vegetables, whole fruits, nuts, seeds, beans, plant oils in your diet.

It is recommended to always have a high protein breakfast and a light dinner. Avoid items such as processed foods, potatoes and high calorie/sugar products. Don't forget to drink water regularly!

**BMI**

BMI recommended range is 18.5 to 24.9. Your BMI is 29.35, which is on a higher side.

Please fill your Health Karma to know your BMI results. BMI for your body helps prevent many untimely diseases and goes a long way.

BMI CHART

| UNDERWEIGHT | NORMAL | OVERWEIGHT | OBESITY |
|----------------|---------------------|---------------------|--------------|
| Less than 18.5 | Between 18.5 - 24.9 | Between 25.0 - 29.9 | More than 30 |

BMI

Supplement Suggestions

Sharadchandra V Tilay

Booking ID : 10575199498 | Sample Collection Date : 19/Apr/2024

Your test report has indicated that you have certain deficiencies in your body which may hamper your health & wellbeing in the longer run.

In order to fulfill the gaps in nutrition and promote a healthier body we suggest you the following supplements mentioned below:

| Deficiency/Out of Range Parameter(s) | Suggested Supplement | |
|--------------------------------------|----------------------|--------------------------------------|
| Blood Glucose Fasting | DIABEAT-EASE | To order, call 1800-572-000-4 |
| Bilirubin Total, Serum | LIV-UP | |

Suggestions for Improving Deficiencies



DIABEAT-EASE

Manage diabetes the all-natural way!

An all-natural supplement that helps in lowering your blood sugar levels, thus preventing the onset of diabetes and managing it if you are already a diabetic. By reducing blood sugar levels, this naturally-sourced diabetes supplement enables you to lead a productive life, while managing your diabetes in a safe and natural way.

Remember, ignoring diabetes can cause a lot of serious complications, including:

- Vision & Hearing Loss | • Nerve Damage | • Heart Attack | • Stroke | • Dementia

Infused with the ages-proven goodness of all-natural ingredients, DIABEAT-EASE is the perfect supplement to help you control diabetes without having to worry about side-effects. Sourced from nature's own pharmacy of herbs, the ingredients in DIABEAT-EASE present the following benefits:

Saunf

Helps control blood pressure & manage diabetes

Karela

Reduces blood sugar & reduces cholesterol levels

Chirata

Helps manage high blood pressure, diabetes & detoxifies blood

Ashwagandha

Reduces blood sugar, cholesterol, & triglycerides levels

Vijayasar

Helps manage diabetes by lowering down sugar cravings



LIV-UP

De-toxify your body with a healthier liver.

LIV-UP is a scientifically formulated and clinically proven all-natural supplement that takes care of your liver and its functions. This ayurvedic supplement keeps your liver cool, and optimally functioning, thus promoting healthy digestion. Take the all-natural road to robust liver health with LIV-UP.

Untreated or unmanaged liver issues can cause grave and even lethal complications, which include:

- Liver Infections | • Liver Cancer | • Liver Failure | • Elevated Blood Toxin Levels | • Liver Cirrhosis

Infused with the ages-proven goodness of all-natural ingredients, LIV-UP is the perfect supplement to promote and maintain good liver health, without having to worry about side effects. Sourced from nature's own pharmacy of herbs, the ingredients in LIV-UP present the following benefits:

Methi Dana

Reducing the risk of developing fatty liver disease.

Triphala

Promotes liver function & boosts immunity

Ginger

Supports liver health & prevents liver inflammation

Yellow Myrobalan

Keeps the liver cool & promotes optimal functioning

Kulki

Reduces inflammation & protects the liver from injury

Supplement Suggestions

Sharadchandra V Tilay

Booking ID : 10575199498 | Sample Collection Date : 19/Apr/2024

| Deficiency/Out of Range Parameter(s) | Suggested Supplement |
|--------------------------------------|----------------------|
| TSH Ultra - Sensitive | THYRO FIX |
| Iron, Serum | IRON POWER |

To order, call 1800-572-000-4

Suggestions for Improving Deficiencies



THYRO FIX

Here's nature's way to improve your thyroid function.

THYRO-FIX is a scientifically formulated and clinically proven all-natural supplement that helps strike the optimum balance of your thyroid levels. Whether hyperthyroidism or hypothyroidism, this ayurvedic supplement keeps your thyroid balanced and optimally functioning. Take the all-natural road to a healthy thyroid with THYRO-FIX.

Be it hyperthyroidism or hypothyroidism, untreated thyroid conditions can cause serious health issues, such as:

- Cardiovascular Diseases | • Brittle Bones | • Eye Issues | • Infertility | • Mental Health Concerns

Infused with the ages-proven goodness of all-natural ingredients, THYRO-FIX is the perfect supplement to promote and maintain good thyroid health, without having to worry about side effects. Sourced from nature's own pharmacy of herbs, the ingredients in THYRO-FIX present the following benefits:

Arjun Tree Extract

Decreases thyroid levels in hyperthyroidism to maintain hormonal balance

Ashwagandha

Increases thyroid levels in hypothyroidism to maintain hormonal balance

Anantmool

Anti-inflammatory & anti-oxidant properties reduce the symptoms of thyroid disorder

Asparagus

Regulates blood sugar levels & promotes heart health



IRON POWER

Your all natural weapon against Anaemia

IRON-POWER is a scientifically formulated and clinically proven all-natural supplement that helps you replenish iron in your system and significantly reduce the risk of anemia. This ayurvedic supplement increases blood production and iron levels to keep your body functioning optimally. Keep overall health robust and treat iron deficiency with IRON-POWER

It's widely known that iron is crucial for your health. A lack of iron intake or iron deficiency can cause serious health issues, such as:

- Heart problems | • Growth issues in children | • Pregnancy complications | • Depression | • Increased infection risk

Infused with the ages-proven goodness of all-natural ingredients, IRON-POWER is the perfect supplement to enhance and maintain your iron levels without having to worry about side effects. Sourced from nature's own pharmacy of herbs, the ingredients in IRON-POWER present the following benefits:

Orange Peel Extract

Rich in vitamin C. Helps maintain iron levels


To order, call 1800-572-000-4




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Highly experienced
130+ radiology
specialists



State-of-the-art
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Cash Back

When you book via app

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About Healthians Labs

How we control Report Accuracy at Healthians



Quality Control

We follow Quality control to ensure both **precision & accuracy** of patient results.



Machine Data

We save patient's result values **directly from machines** ensuring no manipulations & no fake values.



QR Code

QR Code based authenticity check on all its reports



Calibration

We make use of calibrators to evaluate the **precision & accuracy** of measurement equipment.



Equipment

Our Labs are equipped with state-of-the-art instruments with **cutting edge technology** to provide faster & reliable results.



EQA

Our Labs participate in EQA & show proven accuracy by checking **laboratory performance** through external agency or facility.

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