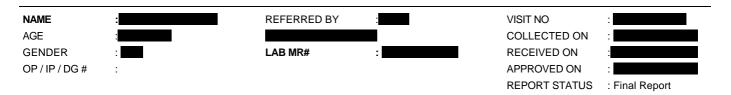




## LABORATORY REPORT



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Test Name	Result	Biological Ref. Interval	Unit
Am-Fit Plus (With Vitamin D & B12)			
	HAEMATOLOG	3Y	
Complete Blood Counts (Whole Blood - EDTA)			
(Automated Hematology Analyzer & Micro	scopy)		
Hemoglobin	13.6	13.0 - 17.0	g/dL
RBC Count	5.2	4.5 - 5.5	10^6/µL
Hematocrit	45.6	40 - 50	%
MCV(Mean Corpuscular Volume)	87.0	83 - 101	fL
MCH(Mean Corpuscular Hemoglobin)	26.0 L	27 - 32	pg
MCHC(Mean Corpuscular Hemoglobin Concentration)	29.8 L	31.5 - 34.5	g/dL
RDW	13.3	11.6 - 14	%
Total Leukocyte Count Electrical impedance/Cell counter	6.5	4.0 - 11.0	10³/µl
Differential count % (VCSn Technology &	light microscopy)		
Neutrophils	62.0	40-80%	%
Lymphocytes	30.0	20-40%	%
Monocytes	5.0	2-10%	%
Eosinophils	3.0	1-6%	%
Basophils	0.0	0-1%	%
Differential Counts, Absolute(calculated)			
Absolute Neutrophil Count	4.03	2.0-7.0	10³/µl
Absolute Lymphocyte Count	1.95	1.0-3.0	10³/µl
Absolute Monocyte Count	0.33	0.2 - 1.0	10³/µl
Absolute Eosinophil Count (AEC)	0.20	0.02-0.5	10³/µl
Absolute Basophil Count	0.00	0.02 - 0.1	10³/µl
Platelet Count Electrical impedance/Cell counter or Manual	181	150 - 410	10³/µl
MPV	13.4 H	7.5 - 11.5	fL

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## LABORATORY REPORT



# 

Test Name	Result	Biological Ref. Interval	Unit
Am-Fit Plus (With Vitamin D & B12)			
	BIOCHEMISTR	RY	
Glucose - Fasting (Fluoride Plasma - F)			
Glucose - Fasting Oxidase & Peroxidase	88.0	Normal:74-100 Pre-diabetic:100-125 Diabetic: >=126	mg/dL
Cholesterol Total - Serum (Serum)			
Cholesterol Total - Serum Enzymatic colorimetric	216.0	<200 Desirable 200-239 Boderline >240 High	mg/dL
Triglycerides (Serum)			
Triglycerides Enzymatic colorimetric	188.0 H	Normal: <150 Borderline-: 150–199 High risk 200–499 Very high risk >500	
Aspartate Aminotransferase (AST/SGOT) (Serum	ו)		
Aspartate Aminotransferase (AST/SGOT) Kinetic IFCC	52 H	8 - 38	U/L
Alanine aminotransferase - (ALT / SGPT) (Serum	)		
Alanine aminotransferase - (ALT / SGPT) Kinetic IFCC	61 H	<mark>4 - 44</mark>	U/L
Uric acid (Serum)			
Uric acid Uricase	8.9 H	4.0 - 7.0	mg/dL
Creatinine (Serum)			
Creatinine Modified Jaffe Kinetic	1.00	0.6 - 1.1	mg/dL
TSH, Thyroid Stimulating Hormone (Serum)			
TSH, Thyroid Stimulating Hormone	4.900	0.38 - 5.33 Pregnant (Ist Trimester) 0.05 - 3.7	µIU/mL
		Pregnant(IInd Trimester) 0.31 - 4.35	
		Pregnant(IIIrd Trimester) 0.41 - 5.18	
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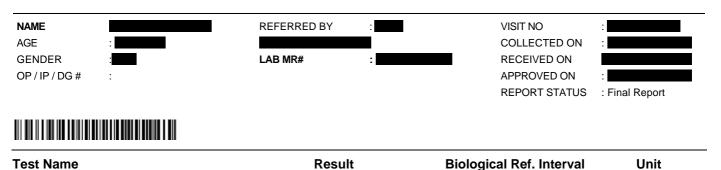




Unit

### LABORATORY REPORT

Result



### Test Name

## Am-Fit Plus (With Vitamin D & B12)

#### Interpretation:

The following potential sources of variation should be considered while interpreting thyroid hormone results:

1. 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. Total T3 and T4 levels are seen to have physiological rise during pregnancy and in patients on steroid treatment

3. 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.

4. T4 may be normal in the presence of hyperthyroidism under the following conditions : T3 thyrotoxicosis, Hypoproteinemia related reduced binding, in presence of drugs (eg Phenytoin, 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 undetected 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

It is recommended to evaluate unbound fractions, that is free T3 (fT3) and free T4 (fT4) for clinic-pathologic correlation, as these are the metabolically active forms.

#### Calcium - Serum (Serum)

Calcium - Serum spectrophotometry	9.20	8.4 - 10.2	mg/dL
Vitamin B12 (Serum)			
Vitamin B12 <i>CLIA</i>	213.0	120 - 914	pg/ml

#### Interpretation:

Vitamin B12 also referred to as cobalamin is a water soluble vitamin. The uptake in the gastro intestinal track depends on intrinsic factor, which is synthesised by gastric parietal cells

Deficiency state:

>Lack of intrinsic factor due to autoimmune atrophic gastritis

>Mal-absorption due to gastrostomy

>Inflammatory bowel disease

>Dietary deficiency (strict vegans)

>Vit B12 deficiency results in megaloblastic anaemia, peripheral neuropathy, dementia and depression

#### Increased levels:

>VIT B12 supplement intake

>Polycythaemia Vera.

## Vitamin D, 25-Hydroxy (Serum)

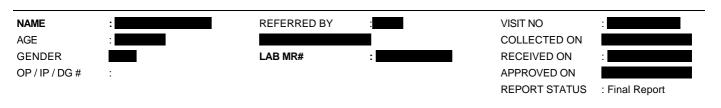
Vitamin D, 25-Hydroxy	32.4	Deficiency : <20	ng/mL
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## LABORATORY REPORT



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Test Name	Result	Biological Ref. Interval	Unit
Am-Fit Plus (With Vitamin D & B12)			
CLIA		Insufficient: 20-30	
		Sufficient: 30-100	
		Toxicity : >100	

### Interpretation:

Vitamin D is a fat soluble vitamin produced in the skin by exposure to sun light. Deficiency in children causes rickets and in adults leads to osteomalacia

#### Decreased levels:

>Impaired cutaneous production (lack of sunlight exposure)

>Dietary absence

>Malabsorption

>Increased metabolism due to drugs like barbiturates, phenytoin.

>Liver disease

>Renal failure

>VIT D receptor mutation

Increased levels:

>Vitamin D intoxication due to increased vit D supplements intake



#### Disclaimer:

1. All results released pertain to the specimen as received by the lab for testing and under the assumption that the patient indicated or identified on the bill/test requisition form is the owner of the specimen.

2. Clinical details and consent forms, especially in Genetic testing, histopathology, as well as wherever applicable, are mandatory to be accompanied with the test requisition form. The non-availability of such information may lead to delay in reporting as well as misinterpretation of test results. The lab will not be responsible for any such delays or misinterpretations thereof.

3. Test results are dependent on the quality of the sample received by the lab. In case the samples are preprocessed elsewhere (e.g., paraffin blocks), results may be compromised.

4. Tests are performed as per the schedule given in the test listing and in any unforeseen circumstances, report delivery may be affected.

5. Test results may show inter-laboratory as well as intra-laboratory variations as per the acceptable norms.

6. Genetic reports as well as reports of other tests should be correlated with clinical details and other available test reports by a qualified medical practitioner. Genetic counselling is advised in genetic test reports by a qualified genetic counsellor, medical practitioner or both.

7. Samples will be discarded post processing after a specified period as per the laboratory's retention policy. Kindly get in touch with the lab for more information.

8. If accidental damage, loss, or destruction of the specimen is not attributable to any direct or negligent act or omission on

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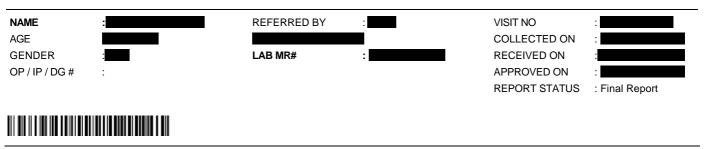


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## LABORATORY REPORT



Test Name	Result	Biological Ref. Interval	Unit
Am-Fit Plus (With Vitamin D & B12)			

the part of Ampath Labs or its employees, Ampath shall in no event be liable. Ampath lab's liability for a lack of services, or other mistakes and omissions, shall be restricted to the amount of the patient's payment for the pertinent laboratory services.



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