

Name of Test	Use of Each Test
A1c	Measure of blood glucose (sugar) control over the preceding 3 months
ACTH	ACTH is produced by the pituitary gland and directs the adrenal glands to produce cortisol.
Albumin	Albumin is a blood protein and may be low in liver damage or kidney disease, abnormal weight loss and malnutrition.
Aldosterone and Renin	Aldosterone and Renin controls the levels of sodium and potassium in the blood and helps to regulate blood pressure.
ALK PHOS Total	Enzyme produced by the liver, bone, and intestinal and may be high in disease of these organs.
ALP1	Elevated in liver disease and cancer of the liver.
ALP2 (Liver)	Elevated in liver disease - earliest marker of liver damage
ALP3 (Bone)	Elevated in excessive bone turnover (osteoporosis, bone cancer, fractures, growth, etc.)
ALP4 (Bowel)	Test for intestinal disease.
Alpha 1-Glycoprotein	Biochemical immune system protein commonly elevated in inflammation and tumors.
Alpha-Fetoprotein	Tumor marker.
Amylase	Test for pancreatitis and/or enzymatic health of pancreas and some other glands.
ANA	Test for Lupus
APO AI	Protein carrier of good cholesterol.
APO AI/B Ratio	Excellent marker for estimated level of coronary occlusion.
APO B	Protein carrier of bad cholesterol.
Basophils	Counts the number of circulating WBC's commonly related to chronic inflammation.
Beta-hCG	Tumor marker.
Bilirubin Direct	High levels suggest liver/ bile duct obstruction and cause jaundice.
Bilirubin Indirect	High levels indicate excessive red blood cell destruction and cause jaundice.
Bilirubin Total	High in patients with jaundice or yellow eyes.
Blood Ketones	Ketones are formed when there is no glucose inside the cell for the body's energy supply (like during starvation, or very high blood sugars in diabetics and there is no insulin to move the glucose into the cell for energy generation). The body is forced to switch to fat for metabolism. This causes ketosis, which may progress to ketoacidosis which is a severe condition that is life threatening.
BNP	High in congestive heart failure (CHF).
BUN	Kidney function test sensitive to hydration and level of dietary protein intake.
BUN/Creatinine Ratio	Kidney function test.
C3 Complement	Biochemical immune protein may be depressed in immune deficiency.
C4 Complement	Biochemical immune protein may be depressed in immune deficiency.
CA 125	Ovarian tumor marker.

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Calcitonin	Calcitonin is a hormone, which is produced by the C-cells in the thyroid gland and this test is used to diagnose medullary thyroid cancer
Calcium Total	Test of calcium level in blood, both bioactive and inactive.
Catecholamines, Plasma and Urine	Catecholamines are hormones produced by the adrenal glands and the test is used to diagnose pheochromocytomas which are tumors which make excessive adrenaline.
CEA	Intestinal tract tumor marker especially colorectal.
Ceruloplasmin	Biochemical immune protein often depressed in chronic fatigue.
Chloride	Very important electrolyte level for life support (found in table salt).
Cholesterol Total	Test for fat metabolism. Generally elevated by consuming animal fats.
Chromogranin A	Chromogranin A may be elevated in benign and malignant tumors, including carcinoid tumors, insulinomas and pheochromocytoma.
CK2 (MB)	Sensitive marker for heart muscle damage (angina, ischemia, MI, etc.).
CK3 (MM)	Sensitive marker for skeletal muscle.
CK TOTAL	Sensitive marker for muscle disease (heart and skeletal combined).
Clotting Time	Measures the rate of blood clot formation.
Cortisol	Adrenal cortex hormone. The test is done at 8am when cortisol levels are highest.
C-Peptide	C-peptide is released from the pancreas at the same time as insulin and is a measure of insulin levels
C-Reactive Protein	Ultra high sensitivity inflammatory marker; especially useful indicator of heart attack risk.
Creatinine	Kidney function filtration test, elevated in proportion to kidney failure.
D-ANA	More sensitive test for Lupus
DHEA-S	Adrenal hormone, a weak male sex hormone which is predominantly found in males but also exists in females. High levels in females related to masculine changes in the body.
eGFR	This is a measure of the creatinine clearance or the ability of the kidney (glomeruli) to filter out waste products. The eGFR is low in renal failure.
Eosinophils	Counts the number of circulating WBC's commonly related to allergy.
ESR	Elevated in inflammation and anemia.
Estradiol	The primary female hormone. This test is useful in disorders of the menstrual cycle and in fertility testing.
Ferritin	Defines the level of total stored iron resources.
Fibrinogen	Clot forming protein used with CRP in evaluating risk of heart attack.
Folic acid	Folic acid is a vitamin that is needed for the formation of red blood cells, and nerve function and may be low in anemia and neuropathy.
Free PSA	Very sensitive marker for prostate disease and prostate tumors.
Fructosamine	The Fructosamine test measures the amount of glucose which is bound to albumin in the blood. The Fructosamine is high when the levels of glucose in the blood are higher than normal.
FSH	Follicle stimulating hormone is a pituitary hormone that stimulates the development of the egg by the ovaries and the production of sperm by the testes and useful in fertility testing and for menstrual disorder.

Name of Test	Use of Each Test
FTI	Calculated thyroid function test index.
Gastrin	Stomach hormone activates production of peristalsis, HCl, intrinsic factor and enzymes.
GGT	Test of liver duct blockage and/or alcoholism.
Globulin	Test for total amount of immune (defensive) proteins in the blood.
Glucose	Test for diabetes and hypoglycemia.
Growth hormone (GH)	Produced by the pituitary gland, for stature and growth.
Haptoglobin	Biochemical immune protein depressed in hemolysis.
HDL Cholesterol	Generally called good cholesterol presumably protects arteries from plaque.
Hematocrit	Measures the red blood cell volume in circulation.
Hemoglobin	Measures the amount of red color in the blood (hemoglobin).
Homocysteine	High levels are associated with increased cardiovascular disease risk.
I3 Uptake	Circulating level of precursor thyroid hormone.
IgA	Antibody production primarily of gut lining origin.
IgE	Antibody production elevated in allergic sensitivity and parasites.
IGF-1	IGF-1 is an indicator of the amount of growth hormone being produced by the body
IgG	Antibody production may be elevated in chronic inflammation.
IgM	Antibody production may be elevated in acute inflammation.
Insulin	Insulin is produced by the pancreas. Insulin may be low in diabetics and high in patients with hypoglycemia due to a tumor of the pancreas (insulinoma).
Ionized Calcium	Test for bioactive or immediate available calcium to muscles, heart, nervous system, etc.
Iron-Total Serum	Blood level for circulating iron.
LDH Total	Combined marker for heart, liver, hemolytic, muscle, lung, renal pathologies.
LDL Cholesterol	Generally called bad cholesterol presumably contributing to damage of arteries.
LH	A Pituitary hormone that stimulates the ovaries and testes; useful in fertility testing.
Lipase	Test for pancreatitis and functional health of pancreas.
Lymphocytes	Counts the number of circulating regenerative white blood cells.
Magnesium Total	Test for magnesium deficiency.
MCH	Measures the concentration of hemoglobin in the red cells.
MCHC	Measures the average concentration of hemoglobin in the red blood cells.
MCV	Measures the size of the red blood cells.
Monocytes	Counts the number of circulating WBC's commonly related to chronic inflammation.
Neutrophils	Counts the number of circulating infection and inflammation-fighting white blood cells.

Name of Test	Use of Each Test
Osmolality	Overall measure of electrolyte balance.
% Saturation	Defines the level of iron carrier protein in use.
pH Blood	Acid/Alkaline balance maintained with great precision in the blood.
Phosphorus	In health maintained in balance with calcium.
Platelets	Non-nucleated circulating cells that protect against blood vessel leakage.
Potassium	Very important electrolyte necessary for life, needs delicate balance.
Prealbumin	Very sensitive test for early evidence of protein deficiency and/or malabsorption. Usually low if patient is malnourished.
Progesterone	Female hormone related to menstrual cycle and pregnancy.
Prolactin	Pituitary hormone. This test is used for diagnosis of amenorrhea, abnormal breast lactation, pituitary tumors.
Protein Total	Circulating available protein in blood.
PSA	Marker for prostate disease and prostate tumors.
PTH	Parathyroid hormone level, may be high in patients with high blood calcium.
Red Blood Count	Measures the number of circulating red blood cells.
SGOT (AST)	May be high in Liver diseases, fatty liver, heart problems.
SGPT (ALT)	High in liver impairment which may be due to obesity (fatty liver), hepatitis, alcohol, medications.
Sodium	Very important electrolyte necessary for life(found in table salt).
T4	Circulating level of primary thyroid hormone.
TC/HDL Ratio	Index to estimate arterial damage or hardening of the arteries.
Testosterone	The primary male hormone. This test is useful in evaluating menstrual disorders, excessive body hair, fertility testing.
Thyroglobulin	Thyroid gland protein in the blood, used to monitor for thyroid cancer recurrence
TIBC	Defines the protein carrier level available for iron transport.
Total Acid PHOS	Tumor marker.
TPO	Thyroid peroxidase antibody, may be high in patients with Hashimoto thyroiditis
Triglycerides	May be elevated in cardiovascular disease and associated with excessive sugar intake.
Troponin I	Ultra sensitive marker for heart muscle cell damage, high in patient with heart attack or MI.
TSH	Thyroid stimulating pituitary hormone. Most sensitive thyroid function test.
Uric Acid	High in gout and low in low protein diet.
Vitamin B12	Maybe depressed in gastric disease or B12 deficiency, or elevated in certain diseases.
Vitamin D	Test to determine vitamin availability for bone repair.
VLDL Cholesterol	Generally called very bad cholesterol presumably contributing to damage of arteries.
White Blood Count	Counts the number of circulating white blood cells.