

Lab Table Report

This report shows a single lab with a table view of all the chemicals and action descriptions.

LABORATORY INTERPRETATIONS OF BLOOD

A typical laboratory today uses an automated electronic system to evaluate blood. The equipment and procedures can accurately detect abnormalities in blood chemistry. Nutritional information can be obtained from the laboratory findings from standard blood chemistry tests. However, the typical medical professional of today only looks at blood chemistry for gross disease abnormalities. Being absent from disease does not mean you are truly healthy.

Usual blood chemistry ranges are obtained by testing volunteers. 95% of the volunteers are used to establish the "reference" ranges. However, it could be safe to say that most of these volunteers are not healthy. This means, you may be within the "reference" ranges while still having illness. A benefit of our detailed report is to look more closely at a narrow more optimal reference range. It is here where we find the maintenance of optimal health and the absence of disease. In Matthew 7:13-14 "Enter by the narrow gate. For the gate is wide and the way is easy that leads to destruction, and those who enter by it are many. For the gate is narrow and the way is hard that leads to life, and those who find it are few." The road to optimal health that is not easy but worth every step because of the rewards.

THE LIFE OF THE FLESH IS THE BLOOD


The prophets of old exclaimed in Leviticus 17:11, "The life of the flesh is the blood". Nutrients such as oxygen, vitamins, minerals and sugar are continuously circulating in the blood to deliver life to the tissues and organs. Poor nutrition and an over abundance of toxins from our environment weakens our body and makes it more susceptible to disease. The CDC studies each year confirm more than 212 toxins exist in the blood of the adult U.S. citizen.

We have observed tens of thousands of our client's blood chemistry reports over our years in business. Much of what we have learned we are sharing with you in this report.

God wants us to be free from disease as he explains in Exodus 15:26, "I will put none of the diseases upon you which I put upon the Egyptians for I am the Lord who heals you." He also wants us to have abundant life as it says in John 10:10. And in 3 John 2 it says, "Beloved, I pray that you may prosper in all things and be in health, just as your soul prospers." As we evaluate your blood chemistry today, we are examining the very life of your flesh and our desire is that you will have hope for healing, in the name of Jesus.

I was diagnosed with a disease nearly 35 years ago. God provided me the direction I needed to overcome disease and see my body healed and restored back to optimal health. The wisdom of God can make a way for you as he has done for me. Trust in Him and follow health principles and you will see better days.

Lab Id	Name	Gender
1-310	Sample Suzy	FEMALE
Created	Updated	
Jun 24, 2014 12:32:14 PM CDT	Jan 10, 2018 11:54:56 AM CST	

Chemical Name	Result	Optimum Range	Usual Range	Units	Action	Chemical Description
Magnesium	2.4	2.6 - 2.2	2.6 - 1.3	mg/dL		Magnesium is necessary for protein and carbohydrate metabolism and certain nerve function. This value represents only 1% of the total body levels of magnesium, more is found in muscle, bone and organ tissue. As a chelating mineral for aluminum this nutrient is important for body balance of toxic minerals. A necessary mineral for each beat of the heart.
Glucose	80.0	90.0 - 75.0	100.0 - 65.0	mg/dl		Glucose is the fasting blood sugar, the preferred fuel for the energy cycle of the body under normal conditions. Approx. 80% of body energy comes from glucose.
BUN- Blood Urea Nitrogen	1.0 	18.0 - 13.0	26.0 - 5.0	mg/dl	Low BUN readings indicate pancreas and/or adrenal inactivity. Low protein intake or under-utilization may also be involved. An amino acid analysis should be considered iodine and pituitary support is recommended. Consider neurotransmitter assessment to evaluate detailed protein status.	Gives metabolic reflection of liver, kidney, and other gland functions. This is a waste product formed by amino acids, the building blocks of protein performed within the liver.
Creatinine	0.9	1.0 - 0.8	1.3 - 0.6	mg/dl		Creatinine is a waste material from muscle catabolism (breakdown).
eGFR	80.0	120.0 - 75.0	120.0 - 60.0	mL/min/1.73		Glomerular filtration rate (GFR) describes the flow rate of filtered fluid through the kidney. Creatinine clearance rate is the volume of blood plasma that is cleared of creatinine per unit time and is a useful measure for approximating the GFR. The results of these tests are important in assessing the excretory function of the kidneys.
Uric Acid	3.5	4.5 - 3.5	8.2 - 2.4	mEq/L		Uric acid is a waste product of protein metabolism. Uric acid is a product of the metabolic breakdown of purine nucleotides.
Sodium	142.0	144.0 - 140.0	146.0 - 133.0	mEq/L		Sodium: Reflects body fluid control and kidney function. Sodium is regulated in the body by aldosterone produced in the adrenal glands. In Mark 9:50 Jesus states "Salt is good" This much needed mineral in the body is important for energy function, circulation, fluid balance and much more.

Chemical Name	Result	Optimum Range	Usual Range	Units	Action	Chemical Description
Potassium	4.4	4.6 - 4.0	5.5 - 3.5	mEq/L		Potassium: Reflects health of the heart muscles and mineral exchange for proper heart regulation. Potassium is the major intracellular electrolyte that must be in balance with sodium. These levels are determined by the health of the adrenal glands.
Chloride	103.0	105.0 - 100.0	109.0 - 96.0	mEq/l		Chloride reflects proper fluid exchange across cell membranes, bowel and bladder.
Carbon Dioxide (CO2)	25.0	28.0 - 24.0	30.0 - 18.0	mEq/L		Carbon Dioxide represents 60% of the blood buffering capacity. However this is not the most accurate measurement for determining body pH balance alone. Urine and saliva pH tests should be performed.
Calcium	10.2 🚩	9.9 - 9.6	10.6 - 8.5	mg/dl	Elevated Calcium levels indicate poor emulsification of fats and improper assimilation in the liver. Gallbladder function is usually involved. If chronic, this could mean an imbalance between the thyroid and parathyroid glands. Low Thyroid with elevated parathyroid is usually seen. Increase magnesium above the calcium levels to excrete excess. Using lipotropic (fatty breakdown) nutrients is very important. If chronic this can cause stones to accumulate in the liver, gallbladder and kidneys. The liver will retain high levels of calcium bound in a fatty congested condition. Diets high in carbohydrates (sugar) cause calcium to be excreted from bone and muscle and can accumulate in organs such as liver, gallbladder and kidneys as well as the arteries., Improving liver health can improve calcium levels. A liver and gallbladder flush is recommended. Elevated calcium is common in youth as bone growth.	One of the top four macro-minerals which is associated with protein absorption through intestinal membranes. This mineral is a critical indicator of primary protein and fat digestion, absorption, and assimilation in the bowel.
Phosphorus	4.0 🚩	3.9 - 3.2	4.5 - 2.5	mg/dl	Elevated phosphorus levels indicate an alkaline digestive tract with a possible deficiency of HCL in the stomach. Carbohydrates are prematurely oxidized resulting in energy loss. Avoidance of excessive cereal grains and soda pop is helpful. Higher levels of phosphorus are often found in childhood. Calcium is often depleted when dietary intake of phosphorous is excessive. Levels are often elevated if hypoparathyroidism is present.	Phosphorus: This mineral, which carries carbohydrates to the liver. It is helpful in maintaining proper bowel pH, and aids the completion of digestion and storage of carbohydrates.
Cholesterol	193.0 🚩	180.0 - 150.0	200.0 - 120.0		High levels of cholesterol are seen in fatty and toxic liver conditions.	All hormones in the male and female body are manufactured from this as a starting material. Up to 1800 mg is produced in the liver daily for cell and hormone support. Dietary intake of Cholesterol is necessary.
Triglyceride	100.0	115.0 - 80.0	150.0 - 0.0	mg/dl		Triglycerides: A form of fat they are a major supply of stored energy in the blood.

Chemical Name	Result	Optimum Range	Usual Range	Units	Action	Chemical Description
Cholesterol HDL	55.0	120.0 - 55.0	120.0 - 40.0	mg		HDL Cholesterol: High Density Lipoprotein, these are considered the "Good guy cholesterol". They act as artery cleansers. HDL is higher in protein and represents the presence of good protein metabolism.
Cholesterol LDL	119.0 ⬆️	90.0 - 50.0	99.0 - 0.0	mg/dl	Elevated LDL is associated with free radical oxidation and increase risk to heart disease. Consider antioxidants and reduce animal and trans fats (margarines, and heat processed oils). Cleansing of the liver and gallbladder is important. Heavy metal testing should be considered as they tend to bind to heavy LDL molecules.	Low Density Lipoprotein, Smaller LDL particles are more susceptible to oxidative damage, these lipids are well documented for determining risk of cardiovascular disease. It is the LDL, which accumulate in the matrix connective tissue of the vessels.
Protein Total	7.2	7.6 - 7.1	8.5 - 6.0	ml		Protein: A representation of Albumin, Globulin and Fibrinogen. These protein molecules transport nutrients and help maintain proper pressure between plasma cells.
Albumin	4.0 🟡	5.0 - 4.5	5.0 - 2.9	gm/dl	Decreased Albumin indicates a low viscosity of the blood with possible water retention, kidney dysfunction and nutritional inadequacies, toxicity or edema. Low levels of albumin usually indicate general malnutrition and reduced liver function. Low protein intake or under utilization with low HCL acid in the stomach is usual present. Chewing food 40-50 times per bite will aid in absorption of protein. Silymarin or Milk Thistle is to be considered to improve protein production in the liver. Vegetarian protein formulas are to be considered as they provide readily available protein that is easy on the digestive tract. A Bio Impedance Analysis should be considered to evaluate calorie protein needs in ratio to activity.	A protein manufactured by the liver and used to transport nutrients and waste material from the body to be excreted. Vitamins and minerals are carried in the blood by albumin to tissues and organs. Albumin score is a reflection of liver health, nutrient availability, protein assimilation and digestion. The word protein means "primary importance"
Globulin	2.6	3.5 - 2.5	3.8 - 2.0	g/100ml		Globulin is A protein faction, which reflects antibodies and other non-cellular defenses against infection and immunity.
Bilirubin, Total	0.9 🟡	0.7 - 0.5	1.3 - 0.1	mg/dl	Elevated Bilirubin indicates inefficient lymphatic or liver/gallbladder function. Jaundice is usually present. Fresh air and sunshine as well as cleansing of the liver/gallbladder and lymph system are helpful. Possible causes can be medication, acidic diet, calcium excess, excess animal dietary intake, hydrogenated oil consumption, pancreatitis and cholesterol obstruction in the liver and gallbladder are probable. A Liver/gallbladder flush is recommended. Magnesium, inositol, choline, methionine, taurine, and Betaine HCL are recommended. Lipotropic herbals such as Artichoke Leaf, Milk Thistle Extract and Chen Pi are beneficial.	Total Bilirubin: Reflects the elimination function of liver and gallbladder. When old red blood cells retire they are converted to bilirubin and then removed from the body via the liver and gallbladder as bile. Bile acts to breakdown essential fats for cell function and bile also helps to excrete toxins from the body. Many plant compounds are effective for activating and facilitating bile excretion.
Alkaline Phosphatase	62.0	80.0 - 60.0	150.0 - 25.0	u/l		Alkaline Phosphatase: An enzyme produced by cellular activity of bones or liver. This level can be an indication of degeneration or repair processes that may be in progress. Alk Phos is a zinc dependent enzyme.

Chemical Name	Result	Optimum Range	Usual Range	Units	Action	Chemical Description
Gamma Glutamyl Transpeptidase (GGT)	35.0 🟡	30.0 - 10.0	70.0 - 7.0	U/L	Elevated GGT levels indicate a toxic or decreased oxygen condition in the liver, gallbladder, bowel or heart. Severely elevated levels can mean rapid or progressive deterioration of any of these tissues. B vitamins, methionine, ascorbate vit. C should be considered. Evaluate glucose for possible insulin elevation. Check for iron overload with Ferritin. High levels are risk for sudden cardiac death event.	GGT is an enzyme of the liver and digestive tract. This test is to give information about hepato-biliary disease, liver function, and alcohol ingestion. GGT is a liver enzyme involved in glutathione metabolism and the transport of amino acids. GGT can be used as a screening marker for excess free iron and is a potent predictor of mortality.
SGOT/AST	19.0	22.0 - 18.0	35.0 - 5.0	U/L		SGOT (AST): Enzyme of the bowel, liver or gallbladder.
SGPT/ALT	20.0	22.0 - 18.0	40.0 - 0.0	mEq/l		SGPT/ALT Serum Glutamic Pyruvic Transaminase, (Alinine Aminotransferase) An enzyme associated with liver function.
Lactic Dehydrogenase (LDH)	156.0	160.0 - 120.0	250.0 - 100.0	u/l		Lactic Dehydrogenase is an enzyme found in liver, pancreas and gallbladder.
Iron (serum)	65.0 🟡	110.0 - 85.0	145.0 - 35.0	mcg/dl	Low Iron indicates iron anemia and deficient bone marrow production, decreased absorption from the bowel and/or high metabolic turnover in the system. Because iron is essential for the oxygen transport in the bloodstream, this deficiency often appears in cases of general fatigue. Vitamin C aids in iron absorption.	Iron reflects the capacity of the spleen and bone marrow to produce red blood cells and for the blood cells to optimize oxygen in the hemoglobin.
Iron Saturation %	20.0	40.0 - 20.0	55.0 - 15.0	%		Iron Saturation% reflects the percentage of iron in the blood that is bound to transferrin, a carrier protein. Its measurement is helpful in assessment of anemia.
WBC (White Blood Cell)	5.0	7.0 - 5.0	11.0 - 4.0	x1000/ cu.mm		Total White Blood Cell count reveals the resistance mechanism of the blood to fight infectious antibodies. During a state of infection or inflammation, WBCs move freely through the blood, destroying invading bacteria, fungus, parasites and viruses.
RBC (Red Blood Cells)	4.5	4.8 - 4.2	5.1 - 3.8	mil		(RBC) Red Blood Cells: Oxygen and nutrient transport cells of the body.
Hemoglobin	13.6	15.5 - 13.5	15.5 - 11.5	g/dl		Hemoglobin is the iron containing and oxygen pigmentation in the blood.
Hemoglobin A1C	5.9 🟡	5.5 - 4.3	6.0 - 4.0	U	Elevated HGBA1C levels indicate a lack of metabolic control or over stimulation of sugar consumption. B vitamins as well as minerals such as zinc, manganese, magnesium, vanadium and chromium are needed. Fenugreek, bitter melon, French lilac, gymnema and rosemary help to balance blood sugar levels. Balance dietary intake of Protein (30%) Fats (30%) and Carbohydrates not to exceed 40% of the diet. Keep calories below 1500 per day for sedentary individuals. A balanced glycemic menu plan based on basal metabolic rate (BMR)and activity factor should be determined and followed closely.	HgbA1C: is a form of hemoglobin used primarily to identify the average plasma glucose concentration over a 3 month period of time. It is formed in a non-enzymatic pathway by hemoglobin's normal exposure to high plasma levels of glucose.

Chemical Name	Result	Optimum Range	Usual Range	Units	Action	Chemical Description
Hematocrit	35.5 🟡	43.0 - 39.0	46.0 - 34.0	%	Low Hematocrit is suggestive of water retention, various types of anemias or an overactive spleen. B12, folic acid and protein are beneficial. L-ascorbate form of vitamin C is helpful for iron uptake into cells.	Percentage of cells in whole blood
MCV (Mean Corpuscular Volume)	86.0	88.0 - 85.0	98.0 - 80.0	cu. microns		(MCV) Mean Corpuscular Volume: Indicates the size of the average red blood cell.
MCH (Mean Corpuscular Hemoglobin)	29.0	32.0 - 28.0	34.0 - 27.0	uu gms		(MCH) Mean Corpuscular Hemoglobin: Determines the average weight of the hemoglobin found in red blood cells.
MCHC (Mean Corpuscular Hemoglobin Concentration)	32.0	35.0 - 32.0	36.0 - 32.0	U/100 ml (%)		(MCHC) Mean Corpuscular Hemoglobin Concentration: Determines if the average red blood cell is anemic.
Neutrophils	56.0	65.0 - 55.0	74.0 - 40.0	%		A chief granulocyte, especially effective as an engulfer (phagocyte) of any cellular debris from catabolism or foreign material in the bloodstream. Functioning as phagocytes, neutrophils release enzymes and seek out to destroy invading organisms in the first line of immune defense.
Lymphocytes	29.0	40.0 - 25.0	48.0 - 19.0	%		Lymphocytes are white blood cells involved in the resistance to bacteria, viruses, allergies, infections and in antibody production to fight cancer cell formation.
Monocytes	7.0	7.0 - 0.0	13.0 - 0.0	% of WBC		Monocytes: These cells are infection fighters that continue the work of neutrophils for immune support. In times of increased inflammation in the body monocytes respond to bring the immune system to respond and restore tissue damage.
Eosinophils	4.0 🟡	2.0 - 0.0	7.0 - 0.0	%	Elevated Eosinophil levels indicate an allergic response to a foreign irritant. Extra vitamin C, fiber, and calcium are generally needed. Bacterial parasites are usually present. Bowel cleansing is necessary. Dysbiosis testing should be considered for evaluation of digestive related problems. Food allergy testing should be considered. Gluten sensitivity can elevate Eosinophils.	Eosinophils are red granulocytes, which are needed by the body to protect against allergic infection of the lungs, bowel, throat and skin. During episodes of an allergic response or parasitic infection these cells will be present in large numbers.
Platelets	229.0	250.0 - 200.0	415.0 - 140.0	K/cu. mm		Platelets: White blood cells, which cause the blood to clot. These are stimulated by injury or stress to the body.

Chemical Name	Result	Optimum Range	Usual Range	Units	Action	Chemical Description
Free T3	3.0	4.2 - 2.5	4.2 - 2.3	pg/ml		Triiodothyronine T3 is a thyroid hormone and affects almost every physiological process in the body, including metabolism, body temperature, heart rate and growth and development. As a hormone on target tissues T3 is approximately four times more potent than those of T4. About 20% of thyroid hormone is produced as T3 and 80% is produced as T4.
Free T4 (Thyroxine) .7-1.9)	1.2	1.95 - 1.0	1.95 - 0.7	ng/dl		T4 Free Thyroxine): The primary free and unbound thyroid hormone produced in the thyroid gland, an energy stimulator of the body. Free T4 is unbound and the most available for cellular use and energy.
T4 (Thyroxine)	5.5 🟡	12.0 - 7.0	12.0 - 4.5	mcg/dl	Low T4 levels indicate an under active thyroid, or decreased basal metabolic rate and impaired liver and adrenal function. A lack of energy and a frequent feeling of tiredness and coldness are usually attributed to this condition. Additional B vitamins, protein and iodine are often necessary in such cases.	T4 (Thyroxine): The primary thyroid hormone produced in the thyroid gland, an energy stimulator of the body.
Thyroid Stimulating Hormone TSH	0.5	1.0 - 0.1	4.5 - 0.1	IU/ML		TSH Thyroid Stimulating Hormone: Is secreted from the pituitary gland. TSH, regulates the uptake of iodine and communicates to the thyroid to influence thyroid hormone production of T3 and T4. TSH secretion is regulated by feedback of circulating free thyroid hormones. Because TSH is not an actual thyroid hormone and other factors affect Thyroid output proper thyroid function can best be determined by testing T3 and T4 output. Thyroid activity increases as cellular health improves from lifestyle change. Because of the negative influence of goitrogens found in grains, gluten and in chlorinated water these chemicals interfere with thyroid function and should be identified and removed from the diet and lifestyle.
CRP/C-Reactive Protein	11.0 🟠	1.5 - 0.0	4.9 - 0.0	mg/L	A repair status deficit when elevated. Elevated CRP levels are also associated with inflammation in heart tissue, metabolic risk factors central (fat) adiposity and insulin resistance associated with blood sugar issues. Antioxidants, moderate exercise, an anti-inflammatory pH alkaline diet and balanced supplementation are recommended.	An inflammatory marker determinant risk to heart disease, diabetes and liver problems. Inflammation is a protective attempt by the organism to remove the injurious stimuli and to initiate the healing process.
pH Urine	5.5 🟠	7.2 - 6.8	7.5 - 6.5	U	Low pH is related to acidosis. An alkaline diet with adequate mineral supplementation should be considered.	Urine pH or potential hydrogen is a measure of the acidity or basicity of the urine in a first morning sample.

Chemical Name	Result	Optimum Range	Usual Range	Units	Action	Chemical Description
Anion Gap	14.0 🟡	12.0 - 7.0	15.0 - 5.0	U/L	Elevated Anion Gap is seen in conditions of lactic acidosis, kidney failure and possible toxic agents possible. Careful alkaline diet with quality minerals and detoxification should be considered. B1, malic acid, B12 taurine, methionine, cysteine and glutamine are helpful. More Raw Fruits and Vegetables are needed.	Anion Gap: The difference between Sodium and Chloride - CO ₂ . This measurement can help to verify lactic acidosis and possible free radical damage.
BUN/Creatinine Ratio	1.11 🟡	20.0 - 12.0	25.0 - 6.0	U/L	Low Ratio is commonly associated with amino acid imbalances due to dietary patterns or gastric hypoacidity. Support of stomach digestion with HCL should be considered. Additional testing such as amino acid analysis and or a neurotransmitter test should be considered.	BUN/Creatinine Ratio is an assessment for determining chronic renal dysfunction.
Coronary Heart Disease Risk (CHD)	3.51 🟡	3.0 - 0.0	4.0 - 0.0	ratio	High CHD is indicative of an increased risk to heart disease. Special dietary considerations of removing excess animal products and refined vegetable oils in conjunction with an alkalizing diet should be considered.	Determines the risk to heart disease. Total Cholesterol/HDL
Calcium Phosphorus Index	40.0	40.0 - 30.0	50.0 - 20.0			(Phosphorus) squared X 2.5 = usable calcium. This calculation indicates the usable calcium value and determines the availability of Vitamin D for calcium absorption.
Calcium/Albumin Ratio	2.55 🟡	2.4 - 2.0	2.7 - 2.0	ratio	Elevated Ca/Alb ratio is seen with protein deficiency or protein loss. Free form amino acids and digestive aids should be taken. An amino acid analysis is recommended to evaluate protein status. Vegetable protein medical food formulas should be considered to help the absorption of Protein.	To determine protein deficiency, malnutrition or visceral protein loss.
Albumin/Globulin Ratio A/G	1.54	2.0 - 1.5	2.7 - 1.1			Albumin/Globulin Ratio A/G: This ratio helps in the differentiation of functional versus organic imbalances in the liver, kidneys or immune system. Digestive factors can be determined from A/G ratio.
Triglyceride/HDL Ratio	1.82 🟡	1.5 - 0.0	4.0 - 0.0	ratio	Elevated are associated with higher amounts of small LDL molecules which are associated with plaque deposits, arteriosclerosis and heart disease. Consider Omega 3 fatty acids found in flax and fish oils. Reduce carbohydrate and sugar intake in the diet.	Given as a marker for the type of LDL molecules in your blood. Large particles do not cause as much harm as the denser non-protective molecules associated with plaque deposits and increase risk to heart disease.