



EVEXIA DIAGNOSTICS

Functional Health Report

Clinician Copy

JANE DOE

Lab Test on Feb 06, 2021
Conventional US Units

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Product Summary Report



The Product Summary Report takes all the information on this report and provides a summary of the nutritional supplements recommended to help bring the systems of the body back into balance. This plan focuses on the top areas of need as presented in this report.

Protocols	Primary Product	Dosage	<input checked="" type="checkbox"/>
Hypoglycemia	Metabolic Essentials 	Take 3 capsules twice per day with a meal.	<input type="checkbox"/>
Hyperlipidemia	Phytosterol Plus 	Take 1 softgel three times per day with each meal.	<input type="checkbox"/>
Immune Insufficiency	Immune Essentials Plus 	Take 4 capsules per day with meals.	<input type="checkbox"/>
Adrenal Stress	Adrenal Plus 	Take 3 capsules per day with meals.	<input type="checkbox"/>
Zinc Need	Zinc Max 	Take 1 capsule daily with a meal.	<input type="checkbox"/>

Other Potential Product Recommendations

Protocols	Additional Product	Dosage	<input checked="" type="checkbox"/>
Hyperlipidemia	Cardio Plus 	Take 2 capsules per day in the evening with food, or as directed by your health care practitioner. For best results, do not take within six hours of taking a vitamin E supplement containing d-alpha tocopherol.	<input type="checkbox"/>

This Product Summary Report has been prepared for your patient based upon current algorithms. Additional personalized recommendations for nutritional support may be applicable based on this laboratory evaluation, your patient's history and your clinical practice experience.

* These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure or prevent any disease.

Health Improvement Plan



The Health Improvement Plan takes all the information on this report and creates unique customized recommendations to help bring the systems of your body back into balance. This plan focuses on the top areas of need as presented in this report.

Hypoglycemia

The results of this blood test indicate a tendency towards hypoglycemia or low blood sugar and a need for blood sugar support. The following provide personalized nutritional support for blood sugar regulation*:

Rationale:

LDH↓

Product Name

Metabolic Essentials

Dosage and Directions

Take 3 capsules twice per day with a meal.

Details

A nationally prominent medical doctor specializing in blood sugar and endocrine health designed this multivitamin and mineral formula. Metabolic Essentials helps maintain healthy glucose and insulin levels, while supporting the conversion of carbohydrates to be used for energy by providing nutrients for the TCA cycle. The magnesium, chromium, zinc, manganese, and vanadium are true chelates from Albion, the leader in the manufacture of mineral chelates with superior absorption. It also includes our proprietary NatureFolate blend of active-isomer naturally occurring folates.



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Hyperlipidemia

The results of this blood test indicate a tendency towards hyperlipidemia, which has been shown to increase the risk of developing atherosclerotic coronary artery disease. There is a need for cardiovascular support, especially support to help lower excessive blood fats. The following provide personalized nutritional support for helping to lower excessive blood fats*:

Rationale:

Cholesterol - Total ↑, LDL Cholesterol ↑

Product Name

Phytosterol Plus

Dosage and Directions

Take 1 softgel three times per day with each meal.

Details

Phytosterol Plus contains Reducol, a phytosterol mixture from the non-GMO tall oil of the coniferous pine tree. Reducol has such significant LDL cholesterol-lowering properties that the FDA allows cholesterol-lowering claims for the plant sterols it contains. **Phytosterol Plus mainly consists of four major phytosterols: beta-sitosterol, campesterol (in the free sterol form, not as sterol esters), campestanol, and sitostanol.



Product Name

Cardio Plus

Dosage and Directions

Take 2 capsules per day in the evening with food, or as directed by your health care practitioner. For best results, do not take within six hours of taking a vitamin E supplement containing d-alpha tocopherol.

Details

Cardio Plus is a powerful combination of natural substances designed to provide nutritional support for cardiac and vascular health. This formula includes high delta-fraction tocotrienols, organic red yeast rice extract (*Monascus purpurea*), and lycopene with added lecithin for bioavailability.
WARNING: Do not use if you are pregnant, may become pregnant, or are breast feeding, as using this product may cause birth defects.



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Immune Insufficiency

The results of this blood test indicate a tendency towards immune insufficiency and a need for immune support. The following provide personalized nutritional support for the immune system*:

Rationale:

Total WBCs ↓, Alk Phos ↓

Product Name

Immune Essentials Plus

Dosage and Directions

Take 4 capsules per day with meals.

Details

Immune Essentials Plus is an herbal formula that is designed to support healthy immune system function during cold and flu season. It contains herbs that support normal natural killer (NK) cell activity and the balance of cytokines, which are the regulatory proteins released by immune cells as part of a normal immune system response.* The standardized herbs in this formula contain optimal and consistent amounts of the most active ingredients. Immune Essentials Plus is suitable for long term use and for all age groups.



Adrenal Stress

The results of this blood test indicate a tendency towards adrenal stress and adrenal hyperfunction and a need for adrenal gland support. The following provides personalized nutritional support for stress tolerance:

Rationale:

Potassium ↓, Sodium/Potassium Ratio ↑, BUN ↑, Triglycerides ↓

Product Name

Adrenal Plus

Dosage and Directions

Take 3 capsules per day with meals.

Details

Adrenal Plus is a combination of standardized herbs and nutrients which are known for rejuvenating the adrenals. This product is designed to promote healthy cortisol levels, hypothalamic and pituitary function (HPTA axis), and catecholamine production (dopamine, norepinephrine, and epinephrine).
**Adrenal Plus does not contain glandulars.



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This Health Improvement Plan has been prepared for your patient based upon current algorithms. Additional personalized recommendations for nutritional support may be applicable based on this laboratory evaluation, your patient's history and your clinical practice experience.

Suggested Individual Nutrient Recommendations

Your Health Improvement Plan takes all the information on this report and creates unique customized recommendations to help bring the systems of your body back into balance. This plan focuses on the top areas of need as presented in this report.

Zinc Need

The results of this blood test indicate that this patient's zinc levels might be lower than optimal and shows a need for zinc supplementation. The following provide a good source of zinc to bring levels back into the optimal range.*

Rationale:
Alk Phos ↓

Product Name
Zinc Max

Dosage and Directions

Take 1 capsule daily with a meal.

Details

Zinc Max offers chelated minerals by Albion Advanced Nutrition, the leader in mineral technology. The zinc is zinc bis-glycinate chelate and the molybdenum is bis-glycinate chelate. These are ideal chelates with a 2:1 molar ratio of two amino acids of glycine chemically bonded in liquid to one mineral ion of zinc or molybdenum for optimal absorption. These minerals are combined with other nutrients like vitamins B6 and taurine to provide superior results.



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This Health Improvement Plan has been prepared for your patient based upon current algorithms. Additional personalized recommendations for nutritional support may be applicable based on this laboratory evaluation, your patient's history and your clinical practice experience.

Blood Test Results Report



The Blood Test Results Report lists the results of the patient's Chemistry Screen and CBC and shows you whether or not an individual element is outside of the optimal range and/or outside of the clinical lab range. The elements appear in the order in which they appear on the lab test form.

Above Optimal Range 3 Current 8 Previous ↑	Above Standard Range 5 Current 3 Previous ↑	Alarm High 0 Current 1 Previous
Below Optimal Range 8 Current 12 Previous ↓	Below Standard Range 2 Current 0 Previous ↓	Alarm Low 0 Current 0 Previous

Element	Current	Previous		Impr	Optimal Range	Standard Range	Units
	Feb 06 2020	Nov 11 2019					
Glucose	87.00	97.00	↑		72.00 - 90.00	65.00 - 99.00	mg/dL
Hemoglobin A1C	5.30	5.20			5.00 - 5.50	0.00 - 5.60	%
Insulin - Fasting	6.50	↑ 10.70	↑		2.00 - 5.00	2.00 - 19.00	μIU/ml
BUN	17.00	↑ 21.00	↑		10.00 - 16.00	7.00 - 25.00	mg/dL
Creatinine	0.70	↓ 0.70	↓		0.80 - 1.10	0.40 - 1.35	mg/dL
BUN/Creatinine Ratio	24.30	↑ 30.00	↑		10.00 - 16.00	6.00 - 22.00	Ratio
Sodium	141.00	140.00			135.00 - 142.00	135.00 - 146.00	mEq/L
Potassium	3.80	↓ 3.80	↓		4.00 - 4.50	3.50 - 5.30	mEq/L
Sodium/Potassium Ratio	37.10	↑ 36.84	↑		30.00 - 35.00	30.00 - 35.00	ratio
Chloride	105.00	104.00			100.00 - 106.00	98.00 - 110.00	mEq/L
CO2	30.00	27.00			25.00 - 30.00	19.00 - 30.00	mEq/L
Anion gap	9.80	12.80	↑		7.00 - 12.00	6.00 - 16.00	mEq/L
Uric Acid, female	4.60	4.20			3.00 - 5.50	2.50 - 7.00	mg/dL
Protein, total	7.10	7.20			6.90 - 7.40	6.10 - 8.10	g/dL
Albumin	4.50	4.50			4.00 - 5.00	3.60 - 5.10	g/dL
Globulin, total	2.60	2.70			2.40 - 2.80	2.00 - 3.50	g/dL
Albumin/Globulin Ratio	1.70	1.70			1.40 - 2.10	1.00 - 2.50	ratio
Calcium	9.20	↓ 9.20	↓		9.40 - 10.10	8.60 - 10.40	mg/dL
Calcium/Albumin Ratio	2.04	2.04			0.00 - 2.60	0.00 - 2.70	ratio
Alk Phos	62.00	↓ 59.00	↓		70.00 - 100.00	35.00 - 115.00	IU/L
AST (SGOT)	17.00	15.00			10.00 - 26.00	10.00 - 35.00	IU/L
ALT (SGPT)	14.00	14.00			10.00 - 26.00	6.00 - 29.00	IU/L
LDH	114.00	↓ 123.00	↓		140.00 - 200.00	120.00 - 250.00	IU/L
Bilirubin - Total	0.40	0.60			0.10 - 0.90	0.20 - 1.20	mg/dL
GGT	13.00	13.00			10.00 - 30.00	3.00 - 70.00	IU/L
Iron - Serum	58.00	↓ 64.00	↓		85.00 - 130.00	40.00 - 160.00	μg/dL
Ferritin	45.50	38.10	↓		40.00 - 150.00	10.00 - 232.00	ng/mL

TIBC	347.00	312.00		250.00 - 350.00	250.00 - 425.00	µg/dL
% Transferrin saturation	17.00 ↓	21.00 ↓	👎	24.00 - 50.00	20.00 - 48.00	%
Cholesterol - Total	227.00 ↑	240.00 ↑	👍	155.00 - 190.00	125.00 - 200.00	mg/dL
Triglycerides	44.00 ↓	66.00	👎	50.00 - 100.00	0.00 - 150.00	mg/dL
LDL Cholesterol	148.00 ↑	158.00 ⚠️	👍	0.00 - 120.00	0.00 - 100.00	mg/dL
HDL Cholesterol	70.00	69.00		55.00 - 70.00	46.00 - 100.00	mg/dL
Cholesterol/HDL Ratio	3.20 ↑	3.50 ↑	👍	0.00 - 3.00	0.00 - 5.00	Ratio
Triglyceride/HDL Ratio	0.62	0.95		0.00 - 2.00	0.00 - 3.30	ratio
TSH	1.75	0.69 ↓	👍	1.00 - 3.00	0.40 - 4.50	µU/mL
Free T3	3.00	2.60 ↓	👍	2.80 - 3.50	2.30 - 4.20	pg/ml
Free T4	1.26	1.17		1.00 - 1.50	0.80 - 1.80	ng/dL
Thyroid Peroxidase (TPO) Abs	28.00			0.00 - 34.00	0.00 - 34.00	IU/ml
Homocysteine	4.80	6.40 ↑	👍	0.00 - 6.00	0.00 - 10.30	µmol/L
Fibrinogen	248.00 ↓	231.00 ↓	👍	295.00 - 369.00	175.00 - 425.00	mg/dl
Vitamin D (25-OH)	51.00	72.00		50.00 - 90.00	30.00 - 100.00	ng/ml
Total WBCs	3.90 ↓	5.50	👎	5.30 - 7.50	3.80 - 10.80	k/cumm
RBC, Female	4.40	4.42		3.90 - 4.50	3.80 - 5.10	m/cumm
Hemoglobin, Female	13.60	13.30 ↓	👍	13.50 - 14.50	11.70 - 15.50	g/dl
Hematocrit, Female	39.90	39.90		37.00 - 44.00	35.00 - 45.00	%
MCV	91.00	90.00		85.00 - 92.00	80.00 - 100.00	fL
MCH	31.00	30.20		27.00 - 31.90	27.00 - 33.00	pg
MCHC	34.20	33.50		32.00 - 35.00	32.00 - 36.00	g/dL
Platelets	239.00	231.00		150.00 - 400.00	140.00 - 400.00	k/cumm
RDW	12.00	13.10 ↑	👍	11.70 - 13.00	11.00 - 15.00	%
Neutrophils	50.50	63.40 ↑	👍	40.00 - 60.00	38.00 - 74.00	%
Lymphocytes	38.30	29.10		25.00 - 40.00	14.00 - 46.00	%
Monocytes	8.90 ↑	5.80	👎	0.00 - 7.00	0.00 - 7.00	%
Eosinophils	1.70	0.80		0.00 - 3.00	0.00 - 3.00	%
Basophils	0.60	0.90		0.00 - 1.00	0.00 - 1.00	%

% Deviation from Optimal Report



This report shows the elements on the blood test that are farthest from optimal expressed as a %. The elements that appear closest to the top and the bottom are those elements that are farthest from optimal and should be carefully reviewed.

Element	% from Median	Lab Result	Low	High	Optimal Reference Ranges	
					Low	High
BUN/Creatinine Ratio	188	24.30	10.00	16.00		
Cholesterol - Total	156	227.00	155.00	190.00		
Insulin - Fasting	100	6.50	2.00	5.00		
Sodium/Potassium Ratio	92	37.10	30.00	35.00		
Monocytes	77	8.90	0.00	7.00		
LDL Cholesterol	73	148.00	0.00	120.00		
BUN	67	17.00	10.00	16.00		
Cholesterol/HDL Ratio	57	3.20	0.00	3.00		
HDL Cholesterol	50	70.00	55.00	70.00		
CO2	50	30.00	25.00	30.00		
TIBC	47	347.00	250.00	350.00		
Lymphocytes	39	38.30	25.00	40.00		
MCV	36	91.00	85.00	92.00		
Sodium	36	141.00	135.00	142.00		
Glucose	33	87.00	72.00	90.00		
Chloride	33	105.00	100.00	106.00		
RBC, Female	33	4.40	3.90	4.50		
Thyroid Peroxidase (TPO) Abs	32	28.00	0.00	34.00		
MCH	32	31.00	27.00	31.90		
Homocysteine	30	4.80	0.00	6.00		
Calcium/Albumin Ratio	28	2.04	0.00	2.60		
MCHC	23	34.20	32.00	35.00		
Uric Acid, female	14	4.60	3.00	5.50		
Hemoglobin A1C	10	5.30	5.00	5.50		
Basophils	10	0.60	0.00	1.00		
Eosinophils	7	1.70	0.00	3.00		
Anion gap	6	9.80	7.00	12.00		
Neutrophils	2	50.50	40.00	60.00		
Free T4	2	1.26	1.00	1.50		
Albumin	0	4.50	4.00	5.00		
Globulin, total	0	2.60	2.40	2.80		
AST (SGOT)	-6	17.00	10.00	26.00		
Albumin/Globulin Ratio	-7	1.70	1.40	2.10		
Hematocrit, Female	-9	39.90	37.00	44.00		
Protein, total	-10	7.10	6.90	7.40		

Bilirubin - Total	-12	0.40	0.10	0.90	
TSH	-12	1.75	1.00	3.00	
Platelets	-14	239.00	150.00	400.00	
Triglyceride/HDL Ratio	-19	0.62	0.00	2.00	
Free T3	-21	3.00	2.80	3.50	
ALT (SGPT)	-25	14.00	10.00	26.00	
RDW	-27	12.00	11.70	13.00	
GGT	-35	13.00	10.00	30.00	
Hemoglobin, Female	-40	13.60	13.50	14.50	
Ferritin	-45	45.50	40.00	150.00	
Vitamin D (25-OH)	-48	51.00	50.00	90.00	
Triglycerides	-62	44.00	50.00	100.00	
Alk Phos	-77	62.00	70.00	100.00	
% Transferrin saturation	-77	17.00	24.00	50.00	
Calcium	-79	9.20	9.40	10.10	
Creatinine	-83	0.70	0.80	1.10	
Potassium	-90	3.80	4.00	4.50	
LDH	-93	114.00	140.00	200.00	
Iron - Serum	-110	58.00	85.00	130.00	
Fibrinogen	-114	248.00	295.00	369.00	
Total WBCs	-114	3.90	5.30	7.50	

Out of Optimal Range Report



The following results show all of the elements that are out of the optimal reference range. The elements that appear closest to the top of each section are those elements that are farthest from optimal and should be carefully reviewed.

Above Optimal Range

8 Total



Below Optimal Range

10 Total



Above Optimal

BUN/Creatinine Ratio ↑ 24.30 Ratio (+ 188 %)

The BUN/Creatinine is a ratio between the BUN and Creatinine levels. An increased level is associated with renal dysfunction. A decreased level is associated with a diet low in protein.

Cholesterol - Total ↑ 227.00 mg/dL (+ 156 %)

Cholesterol is a steroid found in every cell of the body and in the plasma. It is an essential component in the structure of the cell membrane where it controls membrane fluidity. It provides the structural backbone for every steroid hormone in the body, which includes adrenal and sex hormones and vitamin D. The myelin sheaths of nerve fibers are derived from cholesterol and the bile salts that emulsify fats are composed of cholesterol. Cholesterol is made in the body by the liver and other organs, and from dietary sources. The liver, the intestines, and the skin produce between 60-80% of the body's cholesterol. The remainder comes from the diet. An increased cholesterol is just one of many independent risk factors for cardiovascular disease. It is also associated with metabolic syndrome, hypothyroidism, biliary stasis, and fatty liver. Decreased cholesterol levels are a strong indicator of gallbladder dysfunction, oxidative stress, inflammatory process, low fat diets and an increased heavy metal burden.

Insulin - Fasting ↑ 6.50 μIU/ml (+ 100 %)

insulin is the hormone released in response to rising blood glucose levels and decreases blood glucose by transporting glucose into the cells. Often people lose their ability to utilize insulin to effectively drive blood glucose into energy-producing cells. This is commonly known as "insulin resistance" and is associated with increasing levels of insulin in the blood. Excess insulin is associated with greater risks of heart attack, stroke, metabolic syndrome and diabetes.

Sodium/Potassium Ratio ↑ 37.10 ratio (+ 92 %)

The Sodium:Potassium ratio is determined from the serum sodium and serum potassium levels. Both elements are under the influence of the adrenal glands. An increased Sodium:Potassium ratio is associated with acute stress and a decreased Sodium:Potassium ratio is associated with chronic stress and adrenal insufficiency.

Monocytes ↑ 8.90 % (+ 77 %)

Monocytes are white blood cells that are the body's second line of defense against infection. They are phagocytic cells that are capable of movement and remove dead cells, microorganisms, and particulate matter from circulating blood. Levels tend to rise at the recovery phase of an infection or with chronic infection.

LDL Cholesterol ↑ 148.00 mg/dL (+ 73 %)

LDL functions to transport cholesterol and other fatty acids from the liver to the peripheral tissues for uptake and metabolism by the cells. It is known as “bad cholesterol” because it is thought that this process of bringing cholesterol from the liver to the peripheral tissue increases the risk for atherosclerosis. An increased LDL cholesterol is just one of many independent risk factors for cardiovascular disease. It is also associated with metabolic syndrome, oxidative stress and fatty liver.

BUN ↑ 17.00 mg/dL (+ 67 %)

BUN or Blood Urea Nitrogen reflects the ratio between the production and clearance of urea in the body. Urea is formed almost entirely by the liver from both protein metabolism and protein digestion. The amount of urea excreted as BUN varies with the amount of dietary protein intake. Increased BUN may be due to an increased production of urea by the liver or decreased excretion by the kidney. BUN is a test used predominantly to measure kidney function, where it will be increased. An increased BUN is also associated with dehydration and hypochlorhydria. A low BUN is associated with malabsorption and a diet low in protein.

Cholesterol/HDL Ratio ↑ 3.20 Ratio (+ 57 %)

The ratio of total cholesterol to HDL is a far better predictor of cardiovascular disease than cholesterol by itself. A lower ratio is ideal because you want to lower cholesterol (but not too low) and raise HDL. A level below 3.0 would be ideal. Every increase of 1.0, i.e. 3.0 to 4.0 increases the risk of heart attack by 60%.

Below Optimal

Total WBCs ↓ 3.90 k/cumm (- 114 %)

The total White Blood Cell (WBC) count measures the sum of all the WBCs in the peripheral blood. White Blood Cells fight infection, defend the body through a process called phagocytosis, and produce, transport and distribute antibodies as part of the immune process. It is important to look at the WBC differential count (neutrophils, lymphocytes, etc.) to locate the source of an increased or decreased WBC count.

Fibrinogen ↓ 248.00 mg/dl (- 114 %)

Fibrinogen is one of the principle blood clotting proteins. It is produced in the liver and liver disease and dysfunction can cause a decrease in the level of circulating fibrinogen. Levels increase with tissue inflammation or tissue destruction. Elevated fibrinogen levels are associated with an increased risk of cardiovascular disease, heart attack, and stroke. Fibrinogen levels are often elevated in patients suffering from cancer, especially colon cancer.

Iron - Serum ↓ 58.00 µg/dL (- 110 %)

Serum iron reflects iron that is bound to serum proteins such as transferrin. Serum iron levels will begin to fall somewhere between the depletion of the iron stores and the development of anemia. Increased iron levels are associated with liver dysfunction, conditions of iron overload (hemochromatosis and hemosiderosis) and infections. Decreased iron levels are associated with iron deficiency anemia, hypochlorhydria and internal bleeding. The degree of iron deficiency is best appreciated with ferritin, TIBC and % transferrin saturation levels.

LDH ↓ 114.00 IU/L (- 93 %)

LDH represents a group of enzymes that are involved in carbohydrate metabolism. Decreased levels of LDH often correspond to hypoglycemia (especially reactive hypoglycemia), pancreatic function, and glucose metabolism. Increased levels are used to evaluate the presence of tissue damage to the cell causing a rupture in the cellular cytoplasm. LDH is found in many of the tissues of the body, especially the heart, liver, kidney, skeletal muscle, brain, red blood cells, and lungs. Damage to any of these tissues will cause an elevated serum LDH level.

Potassium ↓ 3.80 mEq/L (- 90 %)

Potassium is one of the main electrolytes in the body. Due to the critical functions of potassium for human metabolism and physiology it is essential for the body to maintain optimum serum levels even though a small concentration is found outside of the cell. Potassium levels should always be viewed in relation to the other electrolytes. Potassium concentration is greatly influenced by adrenal hormones. As such, potassium levels can be a marker for adrenal dysfunction.

Creatinine ↓ 0.70 mg/dL (- 83 %)

Creatinine is produced primarily from the contraction of muscle and is removed by the kidneys. A disorder of the kidney and/or urinary tract will reduce the excretion of creatinine and thus raise blood serum levels. Creatinine is traditionally used with BUN to assess for impaired kidney function. Elevated levels can also indicate dysfunction in the prostate.

Calcium ↓ 9.20 mg/dL (- 79 %)

Serum calcium levels, which are tightly regulated within a narrow range, are principally regulated by parathyroid hormone (PTH) and vitamin D. A low calcium level indicates that calcium regulation is out of balance and not necessarily that the body is deficient of calcium and needs supplementation. Check vitamin D levels, rule out hypochlorhydria, the need for magnesium, phosphorous, vitamin A, B and C, unsaturated fatty acids, and iodine as some of the reasons for a calcium "need" before supplementing with calcium. An elevated calcium is associated with parathyroid hyperfunction. If significantly elevated (>10.6 mg/dl or 2.65 mmol/L) check serum PTH levels and refer to an endocrinologist.

% Transferrin saturation ↓ 17.00 % (- 77 %)

The % transferrin saturation index is a calculated value that tells how much serum iron is bound to the iron-carrying protein transferrin. A % transferrin saturation value of 15% means that 15% of iron-binding sites of transferrin is being occupied by iron. It is a sensitive screening test for iron deficiency anemia if it is below the optimal range.

Alk Phos ↓ 62.00 IU/L (- 77 %)

Alkaline phosphatase (ALP) is a group of isoenzymes that originate in the bone, liver, intestines, skin, and placenta. It has a maximal activity at a pH of 9.0-10.0, hence the term alkaline phosphatase. Decreased levels of ALP have been associated with zinc deficiency.

Triglycerides ↓ 44.00 mg/dL (- 62 %)

Serum triglycerides are composed of fatty acid molecules that enter the blood stream either from the liver or from the diet. Patients that are optimally metabolizing their fats and carbohydrates tend to have a triglyceride level about one-half of the total cholesterol level. Levels will be elevated in metabolic syndrome, fatty liver, in patients with an increased risk of cardiovascular disease, hypothyroidism and adrenal dysfunction. Levels will be decreased in liver dysfunction, a diet deficient in fat, and inflammatory processes.

Functional Index Report



The indices shown below represent an analysis of this blood test. These results have been converted into your patient's individual Functional Index Report based on our latest research. This report gives you an indication of the level of dysfunction that exists in the various physiological systems in the body. Please use this report in conjunction with the "Practitioner's Only Clinical Dysfunctions Report" to identify which dysfunctions and conditions are causing changes in the Functional Index and to put together a unique treatment plan designed to bring their body back into a state of functional health, wellness and energy.

Score Guide: 90% - 100% - Dysfunction Highly Likely, 70% - 90% - Dysfunction Likely, 50% - 70% - Dysfunction Possible, < 50% - Dysfunction Less Likely.

Functional Index	0%	100%
Lipid Panel Index		82%
Blood Sugar Index		69%
Immune Function Index		63%
Adrenal Function Index		61%
Kidney Function Index		53%
Gallbladder Function Index		42%
Electrolyte Index		40%
GI Function Index		30%
Cardiovascular Risk Index		29%
Inflammation Index		19%
Liver Function Index		15%
Oxidative Stress Index		12%
Acid-Base Index		10%
Heavy Metal Index		8%
Bone Health Index		6%
Allergy Index	0%	
Toxicity Index	0%	
Red Blood Cell Index	0%	
Thyroid Function Index	0%	
Sex Hormone Index - Female	0%	

Lipid Panel Index

A high Lipid Panel Index indicates that there is a strong clinical indication of hyperlipidemia, which has been shown to indicate a potential risk of developing atherosclerotic coronary artery disease. Although hyperlipidemia is a cause, it's important to look at many other risks for this disease including smoking, blood sugar dysregulation, hypertension, elevated homocysteine and other diet and lifestyle considerations. Based on this blood test, your patient's Lipid Panel is:

[82%] - Dysfunction Likely. Improvement required.

Rationale:

Cholesterol - Total ↑, LDL Cholesterol ↑

Elements Considered:

Cholesterol - Total, Triglycerides, LDL Cholesterol, Cholesterol/HDL Ratio, HDL Cholesterol

Blood Sugar Index

A high Blood Sugar Index indicates that there is dysfunction in this patient's blood sugar regulation. Blood sugar dysregulation is affected by genetics, diet, lifestyle, nutrition and environment. Some factors to consider include hypoglycemia, metabolic syndrome, insulin resistance, hyperinsulinemia, and type 2 Diabetes. Based on this blood test, your patient's Blood Sugar Index is:

[69%] - Dysfunction Possible. There may be improvement needed in certain areas.

Rationale:

LDH ↓, Insulin - Fasting ↑, Cholesterol - Total ↑, LDL Cholesterol ↑

Elements Considered:

Glucose, LDH, Hemoglobin A1C, Insulin - Fasting, Cholesterol - Total, Triglycerides, LDL Cholesterol, HDL Cholesterol

Patient Result Not Available - Consider Running In Future Tests:

DHEA-S, Female, Leptin, Female

Immune Function Index

A high reading in the Immune Function Index indicates that there is dysfunction within your patient's immune system and further assessment is needed to pinpoint exactly what that dysfunction is. Some of the factors to consider include immune insufficiency, bacterial or viral infections or GI dysfunction associated with immune function: abnormal mucosal barrier function, secretory IgA dysfunction or dysbiosis. Based on this blood test, your patient's Immune Function Index is:

[63%] - Dysfunction Possible. There may be improvement needed in certain areas.

Rationale:

Total WBCs ↓, Monocytes ↑, Alk Phos ↓, Iron - Serum ↓

Elements Considered:

Total WBCs, Globulin, total, Neutrophils, Lymphocytes, Monocytes, Albumin, Alk Phos, Iron - Serum, Ferritin

Adrenal Function Index

A high Adrenal Function Index indicates that there is dysfunction within your patient's adrenal system and further assessment is needed to find out what the dysfunction is. Consider factors that contribute to adrenal hyperactivity, stress, or adrenal insufficiency. Based on this blood test, your patient's Adrenal Function Index is:

[61%] - Dysfunction Possible. There may be improvement needed in certain areas.

Rationale:

Potassium ↓, Sodium/Potassium Ratio ↑, BUN ↑, Cholesterol - Total ↑

Elements Considered:

Sodium, Potassium, Sodium/Potassium Ratio, Glucose, BUN, Chloride, CO2, Cholesterol - Total, Triglycerides

Patient Result Not Available - Consider Running In Future Tests:

DHEA-S, Female, Cortisol - AM, Cortisol - PM

Kidney Function Index

A high Kidney Function Index reflects a decrease in renal function in this patient, which can be due to renal insufficiency or if the BUN and Creatinine are grossly elevated the beginning stages of conditions that can greatly impair renal function. Factors such as dehydration, heavy metal toxicity, over the counter or prescription drugs, impaired liver function or renal infections should be considered. Based on this blood test, your patient's Kidney Function Index is:

[53%] - Dysfunction Possible. There may be improvement needed in certain areas.

Rationale:

BUN ↑, BUN/Creatinine Ratio ↑

Elements Considered:

BUN, Creatinine, BUN/Creatinine Ratio, Uric Acid, female, AST (SGOT), LDH

Patient Result Not Available - Consider Running In Future Tests:

Phosphorus, eGFR Non-Afr. American, eGFR African American, Magnesium

Nutrient Index Report



The indices shown below represent an analysis of your patient's blood test results. These results have been converted into their individual Nutrient Assessment Report based on our latest research. This report gives you an indication of their general nutritional status. Nutritional status is influenced by actual dietary intake, digestion, absorption, assimilation and cellular uptake of the nutrients themselves. You can use this information, along with information about individual nutrient deficiencies, to put together a unique treatment plan designed to bring their body back into a state of functional health, wellness and energy.

Score Guide: 90% - 100% - Nutrient Status is Poor, 75% - 90% - Nutrient Status is Low, 50% - 75% - Moderate Nutrient Status, < 50% - Optimum Nutrient Status

Nutrient Index	0%	100%
Carbohydrate Index		75%
Mineral Index		58%
Fat Index		38%
Hydration Index		30%
Protein Index		12%
Vitamin Index	0%	

Carbohydrate Index

The Carbohydrate Index gives us an assessment of your patient's dietary intake of carbohydrates, especially refined carbohydrates and sugars. A diet high in refined carbohydrates and sugars will deplete phosphorus stores and other important co-factors for carbohydrate metabolism. It may also increase serum glucose and serum triglyceride levels. Follow up a high Carbohydrate Index with a thorough assessment of blood sugar regulation and also an investigation into this patient's dietary consumption of sugars and refined carbohydrates. Based on this blood test, your patient's Carbohydrate Index is:

[75%] - Nutrient Status is Low. Improvement required.

Rationale:

LDH↓, Cholesterol - Total ↑, LDL Cholesterol ↑, Total WBCs ↓

Elements Considered:

Glucose, LDH, Cholesterol - Total, Triglycerides, LDL Cholesterol, HDL Cholesterol, Total WBCs

Patient Result Not Available - Consider Running In Future Tests:

Phosphorus

Mineral Index

The Mineral Index gives us a general indication of the balance of certain minerals in the body based on the results of this blood test. A high Mineral Index indicates a level of deficiency or need in one or more of the minerals reflected in this index, which includes calcium, zinc, copper, potassium, molybdenum, selenium, magnesium, iodine and iron. Factors to consider include the amount in the diet, the ability to digest and breakdown individual minerals from food or supplements consumed, the ability of those minerals to be absorbed, transported and ultimately taken up by the cells themselves. In the case of certain minerals, such as iron and potassium, you must also consider the possibility of a mineral deficiency due to increased excretion or loss, such as increased bleeding causing an iron deficiency. Please use the information at the bottom of this report to identify which mineral or minerals may be deficient. Based on this blood

37 year old Female - Born Dec 20,1982

test, your patient’s Mineral Index is:

[58%] - Moderate Nutrient Status. There may be improvement needed in certain areas.

Rationale:

Potassium ↓, Alk Phos ↓, Iron - Serum ↓, % Transferrin saturation ↓

Elements Considered:

Potassium, Uric Acid, female, Calcium, Alk Phos, GGT, Iron - Serum, Ferritin, TIBC, % Transferrin saturation, Free T3, MCV

Patient Result Not Available - Consider Running In Future Tests:

Phosphorus, Total T3, Magnesium

Individual Nutrient Deficiencies

The values below represent the degree of deficiency for individual nutrients based on your patient’s blood results. The status of an individual nutrient is based on a number of factors such as actual dietary intake, digestion, absorption, assimilation and cellular uptake of the nutrients themselves. All of these factors must be taken into consideration before determining whether or not your patient/client actually needs an individual nutrient. Use the information in this section to put together an individualized treatment plan to bring your patient back into a state of optimal nutritional function.

Score Guide: 90% - 100% - Deficiency Highly Likely, 70% - 90% - Deficiency Likely, 50% - 70% - Deficiency Possible, < 50% - Deficiency Less Likely.

Nutrient Deficiencies	0%	100%
Zinc Need		80%
Iron Deficiency		29%
Magnesium Need		25%
Thiamine Need		10%
Vitamin B12/Folate Need		6%
Vitamin B6 Need	0%	
Iodine Need	0%	
Calcium Need	0%	
DHEA Need	0%	
Vitamin C Need	0%	
Molybdenum Need	0%	
Selenium Need	0%	
Glutathione Need	0%	

Zinc Need

Consider a zinc need if the **Alk phos** levels are decreased.

[80%] - Dysfunction Likely. Improvement required.

Rationale:

Alk Phos ↓

Elements Considered:

Alk Phos

Recommended Further Testing



Advanced Practitioner Only Report

Based on the results of the analysis of this blood test, the following areas may require further investigation. The suggestions for further testing are merely examples and do not attempt to provide you with an exhaustive list of further evaluation methods.

Zinc Deficiency

The results of this blood test indicate that this patient may be dealing with a zinc deficiency because the alk phos level is decreased. We cannot tell categorically that your patient has a zinc deficiency because there are no tests specifically testing for zinc levels on a common Chemistry Screen. The likelihood of zinc deficiency increases with the presence of clinical signs of zinc deficiency: white spots on nails, reduced sense of smell or taste, cuts that are slow to heal, acne, increased susceptibility to colds, infections, and flu, and for our male patients prostatic hypertrophy. If you suspect zinc deficiency, you may want to follow up with an in-office Zinc Taste Test or check White Blood cell or Red Blood cell zinc levels, which may be decreased.

Rationale:

Alk Phos ↓

Additional Lipid Testing

The results of this blood test indicate that this patient may be dealing with hyperlipidemia, which may be causing the elements listed below to be outside the optimal range. If you haven't done so already, you may want to consider running additional lipid tests such as the Cardio IQ (TM) Lipoprotein Fractionation Test to get more information on the nature of the hyperlipidemia and its associated cardiovascular disease risk. The Cardio IQ (TM) Lipoprotein Fractionation Test precisely quantifies lipoprotein fractions across the entire lipoprotein spectrum; this comprises VLDL, IDL, LDL, and HDL particles.

Rationale:

Cholesterol - Total ↑, LDL Cholesterol ↑

Blood Test History Report



The Blood Test History Report lists the results of your patient's Chemistry Screen and CBC tests side by side with the latest test listed on the left hand side. This report allows you to compare results over time and see where improvement has been made and allows you to track progress.

Element	Latest 3 Test Results		
	Jun 08 2018	Nov 11 2019	Feb 06 2020
Glucose	77.00	97.00 ↑	87.00
Hemoglobin A1C	5.00	5.20	5.30
Insulin - Fasting	4.60	10.70 ↑	6.50 ↑
Fructosamine			
C-Peptide			
BUN	10.00	21.00 ↑	17.00 ↑
Creatinine	0.91	0.70 ↓	0.70 ↓
Creatinine, 24-hour urine			
Creatinine Clearance			
eGFR Non-Afr. American	83.00 ↓		
eGFR African American	97.00		
BUN/Creatinine Ratio	10.98	30.00 ↑	24.30 ↑
Sodium	138.00	140.00	141.00
Potassium	4.20	3.80 ↓	3.80 ↓
Sodium/Potassium Ratio	32.85	36.84 ↑	37.10 ↑
Chloride	104.00	104.00	105.00
CO2	26.00	27.00	30.00
Anion gap	12.20 ↑	12.80 ↑	9.80
Uric Acid, female	4.50	4.20	4.60
Protein, total	7.00	7.20	7.10
Albumin	4.60	4.50	4.50
Globulin, total	2.40	2.70	2.60
Albumin/Globulin Ratio	1.90	1.70	1.70
Calcium	9.80	9.20 ↓	9.20 ↓
Calcium/Albumin Ratio	2.13	2.04	2.04
Phosphorus			
Calcium/Phosphorous Ratio			
Collagen Cross-Linked NTx			
Magnesium			

Element	Latest 3 Test Results		
	Jun 08 2018	Nov 11 2019	Feb 06 2020
Alk Phos	42.00 ↓	59.00 ↓	62.00 ↓
LDH	127.00 ↓	123.00 ↓	114.00 ↓
AST (SGOT)	14.00	15.00	17.00
ALT (SGPT)	21.00	14.00	14.00
GGT	11.00	13.00	13.00
Bilirubin - Total	0.90	0.60	0.40
Bilirubin - Direct			
Bilirubin - Indirect			
Iron - Serum	201.00 ↑	64.00 ↓	58.00 ↓
Ferritin	13.00 ↓	38.10 ↓	45.50
TIBC	340.00	312.00	347.00
% Transferrin saturation	59.00 ⚠	21.00 ↓	17.00 ↓
Cholesterol - Total	222.00 ↑	240.00 ↑	227.00 ↑
Triglycerides	93.00	66.00	44.00 ↓
LDL Cholesterol	141.00 ↑	158.00 ⚠	148.00 ↑
HDL Cholesterol	61.00	69.00	70.00
VLDL Cholesterol			
Cholesterol/HDL Ratio	3.60 ↑	3.50 ↑	3.20 ↑
Triglyceride/HDL Ratio	1.52	0.95	0.62
Leptin, Female			
TSH	6.19 ↑	0.69 ↓	1.75
Total T4			
Total T3			
Free T4	0.90 ↓	1.17	1.26
Free T3	2.80	2.60 ↓	3.00
T3 Uptake			
Free Thyroxine Index (T7)			
Thyroid Peroxidase (TPO) Abs	197.00 ⚠		28.00
Thyroglobulin Abs		15.00 ⚠	
Reverse T3			
C-Reactive Protein			
Hs CRP, Female	1.40 ↑		
ESR, Female			
Homocysteine	7.30 ↑	6.40 ↑	4.80

Element	Latest 3 Test Results		
	Jun 08 2018	Nov 11 2019	Feb 06 2020
Fibrinogen	263.00 ↓	231.00 ↓	248.00 ↓
Creatine Kinase			
Vitamin D (25-OH)	26.00 ↓	72.00	51.00
Vitamin B12			
Folate			
DHEA-S, Female			
Cortisol - AM			
Cortisol - PM			
Testosterone, Free Female			
Testosterone, Total Female			
Sex Hormone Binding Globulin, female			
Estradiol, Female			
Progesterone, Female			
Total WBCs	4.80 ↓	5.50	3.90 ↓
RBC, Female	4.59 ↑	4.42	4.40
Reticulocyte count			
Hemoglobin, Female	13.70	13.30 ↓	13.60
Hematocrit, Female	42.30	39.90	39.90
MCV	92.20 ↑	90.00	91.00
MCH	29.80	30.20	31.00
MCHC	32.40	33.50	34.20
Platelets	176.00	231.00	239.00
RDW	12.20	13.10 ↑	12.00
Neutrophils	58.20	63.40 ↑	50.50
Bands			
Lymphocytes	30.30	29.10	38.30
Monocytes	8.40 ↑	5.80	8.90 ↑
Eosinophils	2.30	0.80	1.70
Basophils	0.80	0.90	0.60

Clinical Dysfunctions Report



Advanced Practitioner Only Report

The Clinical Dysfunctions Report shows a list of likely Health Concerns and Nutrient Deficiencies that your patient may be suffering from based on an analysis of their Chemistry Screen and CBC results. Health Concerns that are most likely are listed at the top of the report and the least likely at the bottom.

Score Guide: 90% - 100% - Dysfunction Highly Likely, 70% - 90% - Dysfunction Likely, 50% - 70% - Dysfunction Possible, < 50% - Dysfunction Less Likely.

Health Concerns	0%	100%
Hypoglycemia		100%
Immune Insufficiency		62%
Adrenal Stress		59%
Hyperinsulinemia		43%
Metabolic Syndrome		40%
Biliary Insufficiency/Stasis		36%
Gout		33%
Muscle Atrophy/Breakdown		33%
Hypochlorhydria		31%
Renal Insufficiency		30%
Helicobacter pylori		25%
Metabolic Alkalosis		25%
Gastric Inflammation		20%
Pancreatic Insufficiency		20%
Fatty Liver - Early Stage		18%
Bacterial Infection		18%
Viral Infection		15%
Liver Dysfunction		15%
Adrenal Insufficiency		14%
Renal Disease		14%
Hyperactive Thyroid		10%
Intestinal Parasites		10%
Hypothyroidism - Secondary		9%
Biliary Obstruction	0%	
Fatty Liver/Steatosis	0%	
Hypothyroidism - T4 under conversion	0%	
Iron Overload	0%	
Liver Cell Damage	0%	
Anemia	0%	
Endothelial Dysfunction	0%	
Liver Cirrhosis	0%	

Health Concerns	0%	100%
Metabolic Acidosis	0%	
Testosterone Deficiency	0%	
Intestinal Hyperpermeability	0%	
Dysglycemia	0%	

Hypoglycemia

Consider hypoglycemia with a decreased fasting **blood glucose** along with a decreased **LDH**. Additional elements that may be out of range with hypoglycemia include a decreased **Hemoglobin A1C** and an increased **SGPT/ALT** level.

[100%] - Dysfunction Highly Likely. Much improvement required.

Rationale:

LDH↓

Elements Considered:

Glucose, LDH, Hemoglobin A1C

Immune Insufficiency

Consider an immune insufficiency with a decreased **total WBC count** along with a decreased **albumin**, a decreased **total globulin** and a decreased **alkaline phosphatase** level. Additional elements that may be out of range with immune insufficiency include an increased **total bilirubin**, an increased **hemoglobin**, an increased **hematocrit** and an increased **RBC** count.

[62%] - Dysfunction Possible. There may be improvement needed in certain areas.

Rationale:

Total WBCs↓, Alk Phos↓

Elements Considered:

Total WBCs, Albumin, Globulin, total, Alk Phos, Bilirubin - Total, RBC, Female, Hemoglobin, Female, Hematocrit, Female

Adrenal Stress

Adrenal stress can cause an increase in the secretions of both the glucocorticoid and mineralcorticoid hormones. An increase in aldosterone, the major mineralcorticoid, from adrenal stress will have an impact on potassium and sodium metabolism causing an increase in serum sodium and a decrease in serum potassium. Consider Adrenal Stress with an **increased serum sodium** along with a **decreased serum potassium**. Additional elements that may be out of range with adrenal stress include an **increased chloride**, an **increased BUN**, an **increased CO2** and a **decreased serum triglyceride and total cholesterol**. Urinary chloride will be decreased. Adrenal stress can be confirmed with salivary cortisol/DHEA studies.

[59%] - Dysfunction Possible. There may be improvement needed in certain areas.

Rationale:

Potassium ↓, Sodium/Potassium Ratio ↑, BUN ↑, Triglycerides ↓

Elements Considered:

Sodium, Potassium, Sodium/Potassium Ratio, BUN, Chloride, CO2, Cholesterol - Total, Triglycerides

Patient Result Not Available - Consider Running In Future Tests:

Cortisol - AM, Cortisol - PM

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