



# NutriStat

## COMPLETE

Improving Nutritional & Metabolic Health

Dr. TEST DOCTOR  
TEST HEALTH CENTRE

**TEST PATIENT**

**01-Jan-1960      Female**

**LAB ID: 3890014**



**Interpretation at a Glance**
**Metabolic Summary**

 FIBRINOGEN  
 CHOLESTEROL  
 LDL(Atherogenic)  
 Mean Particle Size  
 GLUCOSE (FASTING)

**Endocrinology Summary**
**Mineral/Metals Summary**

 Copper.  
 MERCURY

**Nutritional Guide**

Nutrient	Adult Dose Range	Units	Clinician Notes
Vitamin-C	450.0	mg	
Vitamin-B1	15.0	mg	
Vitamin-B2	17.0	mg	
Vitamin-B3	13.0	mg	
Vitamin-B5	10.0	mg	
Vitamin-B6	5.0	mg	
Vitamin-B12	450.0	ug	
Chromium .	3.0	ug	
Magnesium .	140.0	mg	
Acetyl-L-Carnitine.	20.0	mg	
N-Acetylcysteine.	5.0	mg	
Glutathione.	4.6	mg	
Glycine .	5.0	mg	
Methionine.	6.0	mg	
Ornithine.	10.0	mg	
Serine.	5.0	mg	
Taurine .	6.0	mg	
Tryptophan.	8.0	mg	
Lactobacillus	1.0	billion CFU	
Probiotics (Multistain)	1.0	billion CFU	
D-Lactate-free probiotics	1.0	billion CFU	

**Disclaimer:**

Supplement recommendations are based on the Organic Acid test results. The prescribing health practitioner must take into consideration the age, weight, sex, and pregnancy or lactation state. In addition, consider clinical state, medication regime, associated drug-nutrient depletion and allergies. The doses listed above are considered optimal, based on lab results and do not apply to specific disease conditions where doses may need to be altered. The vitamins, minerals or amino acids listed are elemental quantities. Use clinical discretion when choosing the right salt with the guidance of your compounding health professional. For example, Magnesium may be prescribed as a glycinate for its calming effect or threonate may be used for a Magnesium that crosses the blood-brain-barrier.

**References:**

Laboratory Evaluations for Integrative and Functional Medicine by Richard Lord. J.Alexander Bralley; Textbook of Nutritional Medicine by Alan Gaby.

**Metabolic Health**

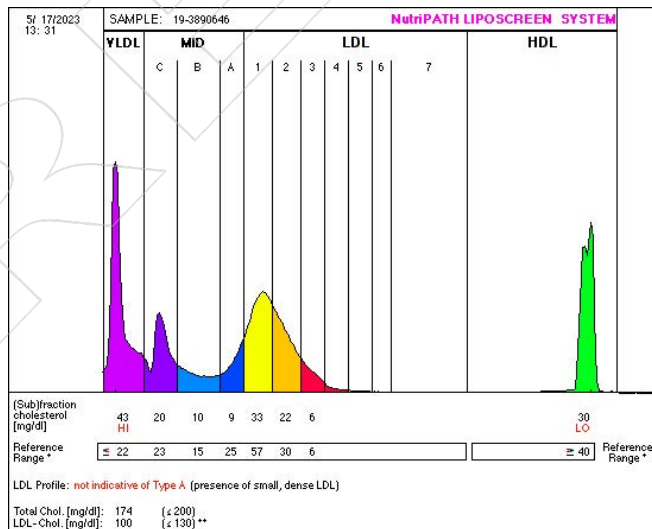
BLOOD - SERUM

	Result	Range	Units	
<b>Cholesterol:</b>	<b>290 *H</b>	< 200.0	mg/dl	
<b>Triglycerides:</b>	<b>97</b>	< 177.0	mg/dl	
<b>HDL Cholesterol:</b>	<b>58</b>	46.3 - 77.2	mg/dl	
<b>Non-HDL Cholesterol:</b>	<b>232 *H</b>	0.0 - 154.0	mg/dl	
<b>LDL/HDL Ratio:</b>	<b>3.7 *H</b>	0.0 - 3.2	RATIO	
<b>Lipoprotein (a):</b>	<b>34.9</b>	0.0 - 34.9	mg/dl	
<b>Apolipoprotein-B:</b>	<b>100</b>	60.0 - 130.0	mg/dl	
<b>Apolipoprotein-A1:</b>	<b>200</b>	110.0 - 205.0	mg/dl	
<b>Apolipoprotein-B/A ratio:</b>	<b>0.5</b>	0.4 - 1.1	RATIO	
<b>High Sensitive CRP:</b>	<b>1.0</b>	0.0 - 5.0	mg/L	
<b>Fibrinogen:</b>	<b>100 *L</b>	200.0 - 450.0	mg/dl	
<b>Glucose, Fasting</b>	<b>108 *H</b>	54.1 - 97.3	mg/dl	
<b>Very Low Density Lipoprotein (VLDL)</b>	<b>43.0 *H</b>	< 22.00	mg/dl	
<b>Intermediate Density Lipoprotein (IDL-1)</b>	<b>20.0</b>	< 23.00	mg/dl	
<b>Intermediate Density Lipoprotein (IDL-2)</b>	<b>10.0</b>	< 15.00	mg/dl	
<b>Intermediate Density Lipoprotein (IDL-3)</b>	<b>9.0</b>	< 25.00	mg/dl	
<b>Low Density Lipoprotein (LDL-1)</b>	<b>33.0</b>	< 57.00	mg/dl	
<b>Low Density Lipoprotein (LDL-2)</b>	<b>22.0</b>	< 30.00	mg/dl	
<b>Low Density Lipoprotein (LDL-3)</b>	<b>6.0</b>	< 6.00	mg/dl	
<b>Low Density Lipoprotein (LDL-4)</b>	<b>&lt;dl</b>	< 0.10	mg/dl	
<b>Low Density Lipoprotein (LDL-5)</b>	<b>&lt;dl</b>	< 0.10	mg/dl	
<b>Low Density Lipoprotein (LDL-6)</b>	<b>&lt;dl</b>	< 0.10	mg/dl	
<b>Low Density Lipoprotein (LDL-7)</b>	<b>&lt;dl</b>	< 0.10	mg/dl	
<b>Mean Particle Size</b>	<b>266.0 *L</b>	> 268.0	Angstrom	

Type B Abnormal

BLOOD - PLASMA

<b>Homocysteine:</b>	<b>11.0</b>	5.0 - 15.0	nmol/ml	
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\*Reference ranges derived from 125 serum samples that met the NCEP ATP III guidelines for desirable lipid status  
\*\*LDL-C is comprised of the sum of cholesterol in Mid bands C through A as well as all the subfractions

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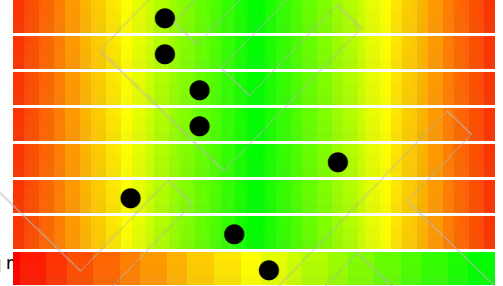
LAB ID : 3890014  
 Collection Date : 11-May-2023  
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BLOOD - SERUM

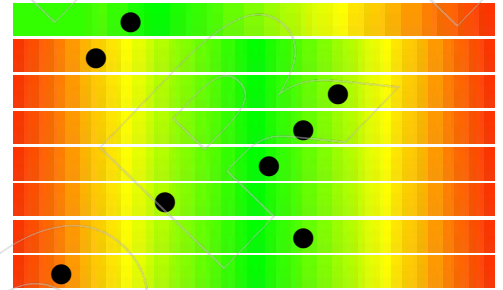
**RENAL FUNCTION TESTS:**

	Result	Range	Units
Sodium:	137	135.0 - 145.0	mmol/L
Potassium:	4.0	3.5 - 5.2	mmol/L
Chloride:	101	95.0 - 110.0	mmol/L
Bicarbonate:	25	20.0 - 32.0	mmol/L
Anion Gap:	15	8.0 - 16.0	mmol/L
Urea (BUN):	11.2	9.8 - 22.4	mg/dl
Creatinine:	0.79	0.51 - 1.02	mg/dl
eGFR:	80 *L	> 90.00	ml/min/1.73sq m



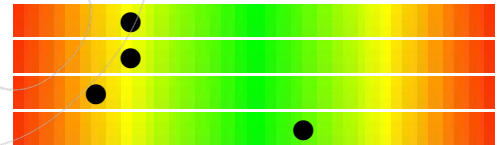
**LIVER FUNCTION TESTS:**

Bilirubin, Total:	0.2	0.0 - 1.2	mg/dl
Alkaline Phosphatase:	33	30.0 - 110.0	units/L
gamma-GT:	30	5 - 35	units/L
ALT:	28	10.0 - 35.0	units/L
AST:	27	10.0 - 35.0	units/L
Total Protein:	6.6	6.0 - 8.0	g/dL
Albumin:	4.4	3.3 - 4.8	g/dL
Globulin:	2.2 *L	2.6 - 3.9	g/dL



**IRON STUDIES:**

Iron:	39.1	27.9 - 168.0	ug/dL
Transferrin:	200	180.0 - 350.0	mg/dl
Transferrin Saturation:	14.0 *L	15.0 - 45.0	%
Ferritin:	220	30.0 - 300.0	ng/mL



**IRON STUDIES INTERPRETATION TABLE**

CONDITION/SYMPTOM	IRON	TRANSFERRIN SATURATION	FERRITIN
Iron Deficiency	Decreased	Decreased	Decreased
Iron Deficiency and Acute Phase Response	Decreased	Normal or Decreased	"Normal" < 100 ng/ml
Acute Phase Response	Decreased	Decreased	Increased
Iron Overload	Increased	Increased	Increased

**VITAMINS**

Active B12:	54	50.6 - 254.0	pg/mL
Folate:	5.8	3.0 - 16.0	ng/mL
25-OH Vitamin D:	25.0 *L	30.0 - 100.0	ng/mL











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### Thyroid Function Health

BLOOD - SERUM	Result	Range	Units	
TSH:	3.00	0.50 - 5.00	mU/L	
FT4:	1.09	0.90 - 1.70	ng/dL	
FT3:	3.4	2.0 - 4.4	pg/mL	
Reverse T3:	17.3	14.9 - 35.1	ng/dL	
FT3/RT3 Ratio:	19.7 *L	> 20.0	RATIO	
Anti-Thyroglobulin Ab:	74.0	0.0 - 115.0	IU/L	
Thyroid Peroxidase Ab:	33.0	0.0 - 35.0	IU/L	
TSH Receptor Ab:	1.2	0.0 - 1.8	IU/L	

### Hormone Health

Progesterone:	0.6		ng/mL	
DHEAS:	52	10.0 - 246.0	ug/dL	
Testosterone, Total:	0.3	0.0 - 0.4	ng/mL	
Sex Horm Binding Globulin (SHBG):	30	27.0 - 128.0	nmol/L	
Testosterone, Free:	5.4	0.3 - 6.3	pg/mL	
Estradiol (E2):	6.5		pg/mL	

	PROGESTERONE	ESTRADIOL
	ng/ml	pg/ml
Follicular phase	0.05 - 0.194	31 - 90.3
Ovulation phase	0.055 - 4.15	60.4 - 533
Luteal phase	4.12 - 14.56	60.4 - 232
Post -menopause	0.05 - 0.126	5.0 - 137
Pregnant - 1st Trim.	11.0 - 44.3	153 - 3237
Pregnant - 2nd Trim.	25.4 - 83.3	1558 - 21243
Pregnant - 3rd Trim.	58.8 - 214	8510 - 29947
Male	0.05 - 0.149	11.2 - 43.2

**PLEASE NOTE:**

Reference ranges are based on the manufacturer's range. These ranges serve as clinical guidelines. However, each individual is unique and evaluation of hormone status should be within the context of the patient's clinical picture.

**Mineral Analysis**

BLOOD - Red Cell	Result	Range	Units	
<b>Chromium</b>	<b>1.20</b>	1.00 - 2.00	ug/L	
<b>COBALT</b>	<b>1.30</b>	0.13 - 1.70	ug/L	
<b>Iodine</b>	<b>17.00</b>	15.00 - 160.00	ug/L	
<b>MANGANESE</b>	<b>9.9</b>	9.0 - 33.0	ug/L	
<b>Molybdenum</b>	<b>1.27</b>	0.60 - 2.00	ug/L	
<b>Selenium.</b>	<b>199.0</b>	190.0 - 500.0	ug/L	
<b>Vanadium</b>	<b>0.44</b>	0.10 - 0.50	ug/L	
<b>Copper.</b>	<b>0.88 *H</b>	0.52 - 0.80	mg/L	
<b>Magnesium.</b>	<b>41.0</b>	39.0 - 58.0	mg/L	
<b>Zinc.</b>	<b>9.14</b>	8.60 - 14.50	mg/L	

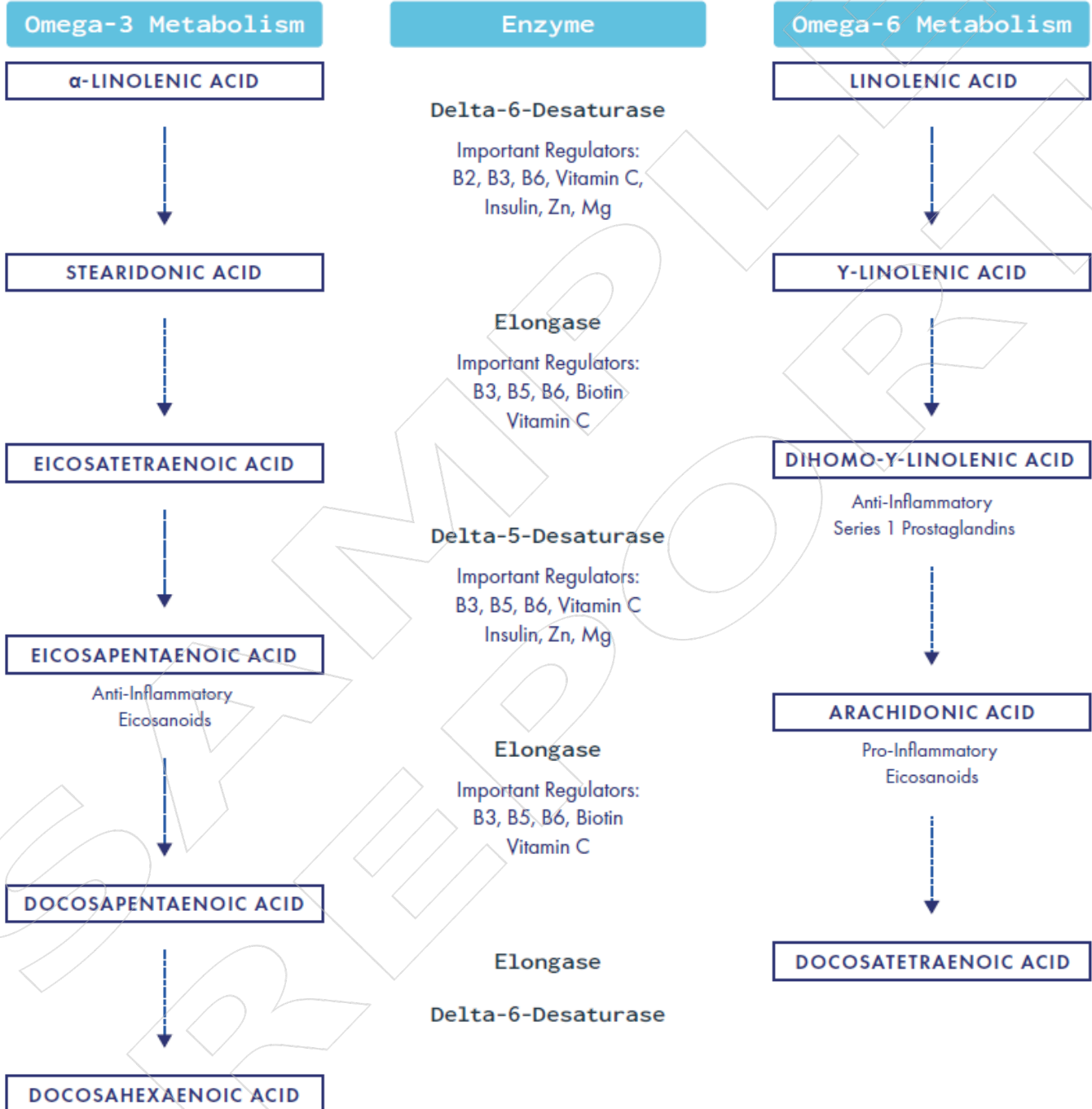
**Metal Analysis**

BLOOD - WHOLE	Result	Range	Units	
<b>ALUMINIUM</b>	<b>0.00</b>	0.00 - 30.00	ug/L	
<b>Antimony</b>	<b>2.00</b>	0.00 - 3.50	ug/L	
<b>ARSENIC</b>	<b>0.00</b>	0.00 - 10.00	ug/L	
<b>BERYLLIUM</b>	<b>0.00</b>	0.00 - 4.00	ug/L	
<b>Bismuth</b>	<b>0.00</b>	0.00 - 1.00	ug/L	
<b>CADMIUM</b>	<b>0.00</b>	0.00 - 1.10	ug/L	
<b>LEAD</b>	<b>0.00</b>	0.00 - 90.00	ug/L	
<b>MERCURY</b>	<b>3.60 *H</b>	0.00 - 2.00	ug/L	
<b>NICKEL</b>	<b>0.00</b>	0.00 - 2.00	ug/L	
<b>Platinum</b>	<b>0.00</b>	0.00 - 0.40	ug/L	
<b>Silver</b>	<b>0.00</b>	0.00 - 2.00	ug/L	
<b>Thallium</b>	<b>0.00</b>	0.00 - 0.60	ug/L	
<b>Tin</b>	<b>0.00</b>	0.00 - 1.30	ug/L	
<b>Uranium</b>	<b>0.00</b>	0.00 - 0.10	ug/L	
<b>Zirconium</b>	<b>0.00</b>	0.00 - 3.00	ug/L	

**CU/ZN & Free Copper Index**

BLOOD - SERUM	Result	Range	Units	
<b>Copper:</b>	<b>147 *H</b>	70.0 - 140.0	ug/dL	
<b>Zinc, Plasma:</b>	<b>65</b>	58.0 - 124.0	ug/dL	
<b>Copper/Zinc Ratio:</b>	<b>2.3 *H</b>	0.8 - 1.0	RATIO	
<b>Ceruloplasmin:</b>	<b>47.0 *H</b>	16.0 - 45.0	mg/dl	
<b>% Free Copper:</b>	<b>5.5</b>	< 20.0	%	

**Essential Fatty Acid Pathways**



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**Essential Fatty Acids**

BLOOD - EDTA

	Result	Range	Units	
<b>RED CELL FATTY ACID PROFILE</b>				
<b>Red Cell Fatty Acid Summary</b>				
Saturated Fats, Total	36.34	29.89 - 42.10	%	
Monounsaturated Fats, Total	22.55	15.65 - 31.82	%	
Omega 3, Total	5.75	2.57 - 15.15	%	
Omega 6, Total	34.94	24.85 - 44.15	%	
Omega 3/Omega 6 Ratio	0.2 *L	0.4 - 0.5	RATIO	
Omega 6/Omega 3 Ratio	6.1	1.9 - 14.6	RATIO	
AA/EPA ratio	9.5	1.1 - 69.2	RATIO	
OMEGA 3 INDEX	5.67		%	
Delta 6 Desaturase Activity	20.5 *H	6.0 - 12.3	RATIO	
<b>Omega 3 Fatty Acids</b>				
alpha Linolenic Acid	0.41	0.10 - 1.90	%	
Eicosapentanoic Acid	0.95	0.14 - 6.92	%	
Docosapentanoic Acid	1.51	0.53 - 2.81	%	
Docosahexanoic Acid	2.88	1.00 - 6.50	%	
Total Omega 3 Fatty acids	5.74	2.57 - 15.15	%	
<b>Omega 6 Fatty Acids</b>				
Linoleic Acid	23.36	14.00 - 31.30	%	
gamma Linolenic Acid	0.26	0.05 - 0.72	%	
Eicosadienoic Acid	0.21	0.10 - 0.43	%	
Dihomo-g-linolenic Acid	1.14	0.50 - 2.50	%	
Arachidonic Acid	9.00	5.00 - 14.80	%	
Docosatetraenoic Acid	0.78	0.30 - 2.50	%	
Docosapentaenoic Acid (n6)	0.19	0.08 - 0.83	%	
Total Omega 6 Fatty Acids	34.94	24.85 - 44.15	%	
<b>Monounsaturated Fats</b>				
Palmitoleic Acid	0.60	0.13 - 2.90	%	
Oleic Acid	21.09	14.20 - 29.50	%	
Gondoic Acid	0.23	0.10 - 0.77	%	
Nervonic Acid	0.63	0.13 - 1.96	%	
Total Monounsaturated Fats	22.55	15.65 - 31.82	%	
Total Omega 9 Fatty Acids	21.95 *H	16.00 - 20.60	%	
<b>Saturated Fatty acids</b>				
Myristic Acid	0.57	0.10 - 2.45	%	
Palmitic Acid	20.84	17.50 - 27.10	%	
Stearic Acid	13.11	8.40 - 15.00	%	
Arachidic Acid	0.57 *H	0.10 - 0.53	%	
Behenic Acid	0.62	0.20 - 1.59	%	
Lignoceric Acid	0.63	0.20 - 1.92	%	
Total Saturated Fats	35.98	29.89 - 42.10	%	
<b>Trans Fatty Acid Profile</b>				
Trans Palmitoleic Acid	0.13	0.10 - 2.45	%	
Trans Oleic Acid	0.41	0.00 - 0.51	%	
Trans Linoleic Fatty Acid	0.27	0.07 - 0.92	%	
Trans Fatty Acids, Total	0.80	0.30 - 2.02	%	
Trans Fat Index	0.68	0.22 - 1.99	%	



**Amino Acids**

BLOOD - LI HEPARI

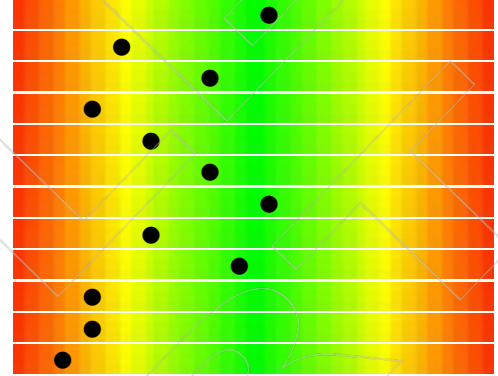
Result

Range

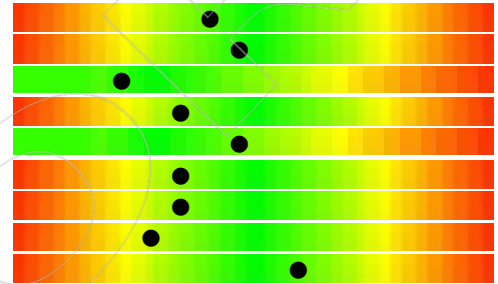
Units

**AMINO ACIDS, Plasma**
**Essential Amino Acids**

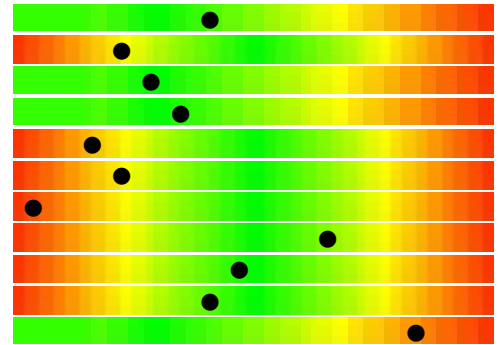
Amino Acid	Result	Range	Units
Arginine	85.0	28.0 - 108	umol/L
Histidine	72.1	65.0 - 104	umol/L
Isoleucine	53.3	30.0 - 75.0	umol/L
Leucine	73.4 *L	77.0 - 155	umol/L
Lysine	134	105 - 207	umol/L
Methionine	24.0	15.0 - 32.0	umol/L
Phenylalanine	55.9	42.0 - 62.0	umol/L
Taurine	43.3	27.0 - 95.0	umol/L
Threonine	156	75.0 - 197	umol/L
Tryptophane	17.0	15.0 - 53.0	umol/L
Valine	147 *L	150 - 250	umol/L
Total Branched Chain AAs	273 *L	324 - 557	umol/L


**Non-Essential Amino Acids**

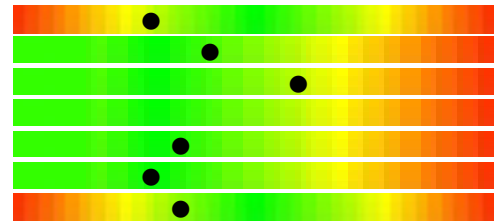
Amino Acid	Result	Range	Units
Alanine	344	218 - 474	umol/L
Asparagine	53.6	26.0 - 74.0	umol/L
Aspartate	0.5	0.0 - 6.0	umol/L
Cystine	38.0	31.0 - 50.0	umol/L
GABA	31.8	0.0 - 50.0	umol/L
Glutamic Acid	23.6	6.0 - 47.0	umol/L
Glutamine	476	340 - 740	umol/L
Proline	126	97.0 - 240	umol/L
Tyrosine	70.6	26.0 - 80.0	umol/L
Large Neutral Amino Acids (LNAA)	399.6		umol/L


**Intermediary Metabolites**

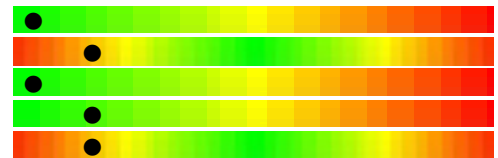
Metabolite	Result	Range	Units
alpha-Amino adipic Acid	3.2	0.0 - 6.0	umol/L
alpha-Aminobutyric Acid	8.5	5.0 - 35.0	umol/L
beta-Aminoisobutyric Acid	2.5	0.0 - 10.0	umol/L
Cystathionine	1.0	0.0 - 3.0	umol/L
Citrulline	9.3 *L	10.0 - 55.0	umol/L
Ornithine	47.0	36.0 - 96.0	umol/L
Urea	1.0 *L	2.8 - 8.1	mmol/L
Glycine	377	100 - 384	umol/L
Serine	130	70.0 - 175	umol/L
Phosphoserine	7.3	2.0 - 14.0	umol/L
Sarcosine	38.5 *H	0.0 - 19.5	umol/L


**Dietary Peptide Related Markers**

Marker	Result	Range	Units
1-Methyl Histidine	12.1	1.0 - 42.0	umol/L
3-Methyl Histidine	2.5	0.0 - 5.0	umol/L
beta-Alanine	10.7	0.0 - 12.0	umol/L
Anserine	0.0	0.0 - 43.0	umol/L
Carnosine	3.4	0.0 - 10.0	umol/L
Hydroxyproline	11.4	0.0 - 53.0	umol/L
Hydroxylysine	3.1	2.0 - 5.0	umol/L


**Amino Acid Functional Ratios**

Ratio	Result	Range	Units
Phenylalanine/Tyrosine	0.79	< 2.00	RATIO
Glutamate/Glutamine	0.05 *L	0.06 - 0.23	RATIO
Hydroxyproline/Proline	0.09	< 0.50	RATIO
a-Amino-n-Butyrate/Leucine	0.12	< 0.2	RATIO
Tryptophan/LNAA	0.04	0.04 - 0.10	RATIO



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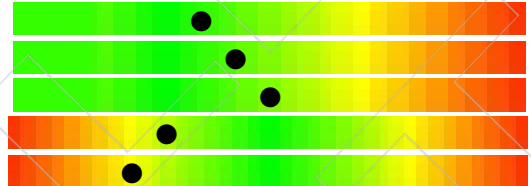
### Nutrient Markers

URINE, SPOT

#### KETONE/FATTY ACID Metabolites

(Carnitine & B2)

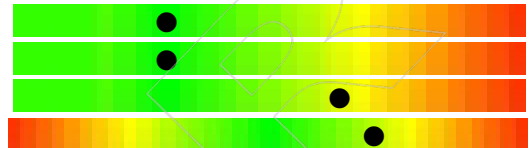
1. Adipic Acid.	3.60	0.00 - 11.10 ug/mgCR
2. Suberic Acid.	2.10	0.00 - 4.60 ug/mgCR
3. Ethylmalonic Acid	4.10	0.00 - 6.30 ug/mgCR
4. Pimelic Acid	12.0	5.9 - 31.8 ug/mgCR
5. Methyl-Succinic Acid	5.50	3.20 - 21.10 ug/mgCR



#### CARBOHYDRATE Metabolism/Glycolysis

(B1, B3, Cr, Lipoic Acid, CoQ10)

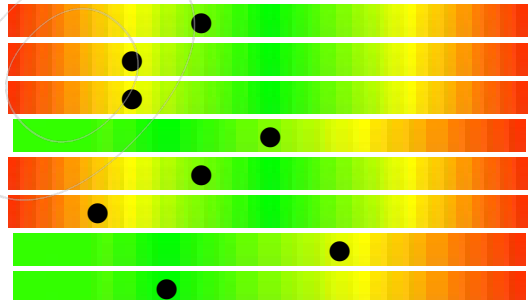
6. Pyruvic Acid.	1.60	0.00 - 6.40 ug/mgCR
7. Lactic Acid.	3.50	0.00 - 16.40 ug/mgCR
8. b-OH-Butyric Acid	8.60	0.00 - 9.90 ug/mgCR
9. Glucose (OA)	1.1	0.3 - 1.1 mmol/L



#### CITRIC ACID CYCLE Metabolites.

(B Comp., CoQ10, Amino Acids, Mg)

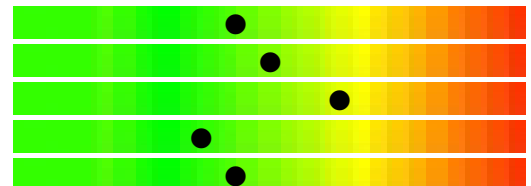
10. Citric Acid.	450.0	56.0 - 987.0 ug/mgCR
11. cis-Aconitic Acid.	29.0	18.0 - 78.0 ug/mgCR
12. Isocitric Acid.	49.0	35.0 - 143.0 ug/mgCR
13. a-Ketoglutaric Acid.	21.00	0.00 - 35.00 ug/mgCR
14. Succinic Acid	9.50	1.10 - 20.90 ug/mgCR
15. Fumaric Acid.	1.10	1.10 - 1.35 ug/mgCR
16. Malic Acid.	2.90	0.00 - 3.10 ug/mgCR
17. b-OH-b-Methylglutaric Acid	1.20	0.00 - 5.10 ug/mgCR



#### B-Complex Vitamins & Amino Acid Markers

(B1, B2, B3, B5, B6, Biotin)

18. a-Ketoisovaleric Acid	0.24	0.00 - 0.49 ug/mgCR
19. a-Ketoisocaproic Acid	0.30	0.00 - 0.52 ug/mgCR
20. a-Keto-b-Methylvaleric Acid	0.95	0.00 - 1.10 ug/mgCR
21. Xanthurenic Acid	0.2	0.0 - 0.5 ug/mgCR
22. beta-Hydroxyisovaleric Acid	5.50	0.00 - 11.50 ug/mgCR



#### METHYLATION COFACTORS

(B12, Folate)

23. Methylmalonic Acid.	2.90 *H	0.00 - 2.30 ug/mgCR
24. Formiminoglutamic Acid **	1.4	0.0 - 2.2 ug/mgCR

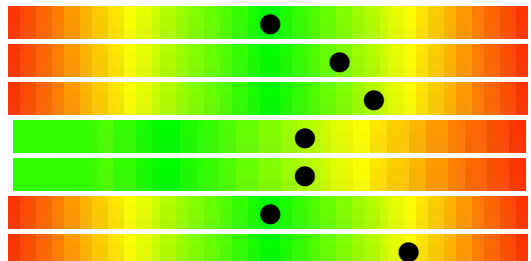


### Cell Regulation Markers

#### NEUROTRANSMITTER METABOLISM

(Tyrosine, Tryptophan, B6, Antioxidants)

25. Homovanillic Acid (HVA)	5.00	1.40 - 7.60 ug/mgCR
26. Vanillylmandelic Acid (VMA)	4.60	1.20 - 5.30 ug/mgCR
27. 5-Hydroxyindoleacetic Acid (5HIAA)	9.60	1.60 - 9.80 ug/mgCR
28. Kynurenic Acid.	1.1	0.0 - 1.5 ug/mgCR
29. Quinolinic Acid (OA)	4.70	0.00 - 5.80 ug/mgCR
30. Picolinic Acid	10.0	2.8 - 13.5 ug/mgCR
31. Cortisol (OA)	555 *H	166 - 507 nmol/L



Methodology: Liquid Chromatography with tandem mass spectrometry (LC-MS-MS).

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 Collection Date : 11-May-2023  
 Received Date: 11-May-2023

Dr.TEST DOCTOR

### Oxidative Damage/AntiOxidant Markers

(Vitamin C and Other Antioxidants)

32.	ParaHydroxyphenyllactate	0.57	0.00 - 0.66 ug/mgCR	
33.	8 OH-deoxyguanosine	3.8	0.0 - 7.6 ug/mgCR	

### Toxicants and Detoxification

#### DETOXIFICATION INDICATORS

(Arg, NAC, Met, Mg, Antioxidants)

34.	2-Methylhippuric Acid	<dl	0.00 - 0.19 ug/mgCR	
35.	Orotic Acid.	0.96	0.00 - 1.01 ug/mgCR	
36.	Glucaric Acid.	5.6	0.0 - 10.7 ug/mgCR	
37.	a-OH-Butyric Acid	0.77	0.00 - 0.90 ug/mgCR	
38.	Pyroglutamic Acid.	33.00	28.00 - 88.00g/mgCR	

### Compounds of Bacterial or Yeast/Fungal Origin

#### BACTERIAL DYSBIOSIS MARKERS.

39.	Benzoate (OA)	18.00 *H	0.00 - 9.30 ug/mgCR	
40.	Hippurate (OA)	944	0.0 - 1070 ug/mgCR	
41.	Phenylacetate	5.6 *H	0.0 - 0.2 ug/mgCR	
42.	Phenylpropionate	2.3 *H	0.0 - 0.1 ug/mgCR	
43.	ParaHydroxyBenzoate	3.5 *H	0.0 - 1.8 ug/mgCR	
44.	p-HydroxyPhenylacetate	24.0	0.0 - 34.0 ug/mgCR	
45.	Indoleacetic Acid	57.00	0.00 - 90.00ug/mgCR	
46.	Tricarballylate	0.95	0.00 - 1.41 ug/mgCR	

#### L. acidophilus/General Bacteria

47.	D-Lactate	0.9	0.0 - 4.1 ug/mgCR	
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#### CLOSTRIDIAL SPECIES

48.	Dihydroxyphenylpropionic Acid	0.1 *H	0.0 - 0.1 ug/mgCR	
49.	4-Cresol	11.0	0.0 - 75.0 ug/mgCR	
50.	3-OH-Propionic Acid	2.0	0.0 - 208.0 ug/mgCR	

#### YEAST/FUNGAL DYSBIOSIS MARKERS.

51.	Arabinitol	5.0	0.0 - 73.0 ug/mgCR	
52.	Citramalic Acid	3.1	0.0 - 3.6 ug/mgCR	
53.	Tartaric Acid.	4.0	0.0 - 7.0 ug/mgCR	

### Oxalate Metabolites

54.	Oxalic Acid	5.60	0.77 - 7.00 ug/mgCR	
55.	Glyceric Acid	21.0	16.0 - 117.0ug/mgCR	
56.	Glycolic Acid	14.0	6.8 - 101.0 ug/mgCR	

### Nutritional Markers

57.	Pyridoxic Acid (Vit B6)	5.0	0.0 - 34.0 ug/mgCR	
58.	Pantothenic Acid (Vit B5)	6.0	0.0 - 10.0 ug/mgCR	
59.	Glutaric Acid (Vit B2) **	0.2	0.0 - 0.4 ug/mgCR	
60.	Ascorbic Acid (Vit C)	9.0 *L	10.0 - 200 ug/mgCR	
61.	CoEnzyme-Q10 (CoQ10) **	15.00	0.17 - 39.00ug/mgCR	
62.	N-Acetylcysteine (NAC)	0.14	0.00 - 0.28 ug/mgCR	
63.	Biotin (Vit H)	2.10	0.19 - 2.70 ug/mgCR	

Creatinine, Urine Spot.	8.0	5.0 - 11.0 mmol/L	
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Results reported as <dl = Less than detectable limit \*\* A high value for this marker may indicate a deficiency of this vitamin

**Methodology:** Liquid Chromatography with tandem mass spectrometry (LC-MS-MS).