



Ordering Physician:

Metamatrix

3425 Corporate Way
Duluth, GA 30096

Accession Number: **A0905210218**

Reference Number:

Patient: Sample Report

Age: 47 *Sex:* Male

Date of Birth: 02/05/1962

Date Collected: 5/20/09

Date Received: 5/21/09

Report Date: 5/21/09

Telephone: (770) 446-4583

Fax: (770) 441-2237

Reprinted: 6/10/09

Comment:

4335 Designs for Health - Energy Essentials Profile

Patient Symptom Summary

B-Vitamin Insufficiency

Your test results show indications of less than optimal B-vitamin status. B-vitamins are essential co-factors in a wide spectrum of chemical reactions within the body and are essential for the production of important hormones and neurotransmitters. B-vitamins are the most important vitamin modulators of human biochemistry. Having less than optimal levels for your individual needs may not cause any specific symptoms in some, but may manifest in many people in the following ways:

- Fatigue and lack of vitality
- Exercise intolerance
- Diminished capacity to deal with stress
- Mood imbalances and sleep disturbance
- Lack of concentration and memory
- Blood sugar regulation difficulties
- Dermatitis and skin disorders

Inefficient Cellular Energy Production

Your test results reveal inefficiency in your cellular energy production. This is a critical process that occurs within all cells and sub-optimal energy production may result in:

- Fatigue and lack of vitality
- Exercise intolerance
- Generalized muscle aches
- Lack of concentration and memory

Detoxification

Your test results reveal sub-optimal ability to detoxify internal and external chemicals and toxins. Elevated body burden of toxin may result in:

- Fatigue and lack of vitality
- Exercise intolerance
- Lack of concentration and memory
- Increased oxidative stress and risk of chronic diseases

Summary of Abnormal Results

	<u>Findings</u>	<u>Intervention Options</u>	<u>Metabolic Association</u>
B-Complex			
Pyruvate	High	Lipoic Acid, B1, B2, B3, B5	Glucose oxidation
a-Ketoglutarate	High	CoQ10, Lipoic Acid, B1, B2, B3, B5	Citric acid cycle
a-Ketoisovalerate	High	Lipoic Acid, B1, B2, B3, B5	Impaired Valine metabolism
Biotin			
No Abnormality Found			
Vitamin B12			
No Abnormality Found			
Inflammation			
Quinolate	High	Magnesium, Anti-inflammatories, Antioxidants	Receptor agonist
Detoxification			
a-Hydroxybutyrate	High	N-acetylcysteine, other sulfur containing a. a., Lipoic Acid	Glutathione demand
CoQ10			
Succinate	High	CoQ10, B-Complex, Calcium, Antioxidants	ATP production
Hydroxymethylglutarate	High	CoQ10	HMG-CoA reductase inhibition
Cellular Energy			
Citrate	High	Arginine, Lipoic Acid	Citric acid cycle
Isocitrate	High	Arginine, Lipoic Acid	Citric acid cycle
Ketone Body			
No Abnormality Found			

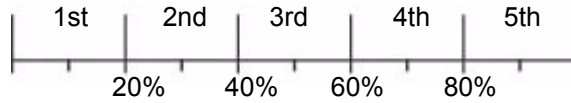
Testing performed by Metamatrix, Inc., 3425 Corporate Way, Duluth, GA 30096

This report is not intended for the diagnosis of neonatal inborn errors of metabolism.

Organix™ Profile Methodology: LC/Tandem Mass Spectroscopy, Colorimetric

Results are expressed as mcg/mg creatinine.
 Ranges are for ages 13 and over

Percentile Ranking by Quintile



**95%
Reference
Interval**

Results

B-Complex

1	Pyruvate	4.5	H	4.2	<= 7.1
2	a-Ketoglutarate	25	H	22	<= 38
3	a-Ketoisovalerate	0.52	H	0.37	<= 0.69

Biotin

4	β-Hydroxyisovalerate	5.5		8.2	<= 11.7
---	----------------------	-----	--	-----	---------

Vitamin B12

5	Methylmalonate	1.4		1.7	<= 2.4
---	----------------	-----	--	-----	--------

Inflammation

6	Quinolate	4.2	H	3.7	<= 5.2
---	-----------	-----	---	-----	--------

Detoxification

7	Orotate	0.4		0.8	<= 1.4
8	Glucarate	6.4		8.1	<= 14.5
9	a-Hydroxybutyrate	0.5	H	0.4	<= 1.4

CoQ10

10	Succinate	13.3	H	12.5	<= 25.7
11	Hydroxymethylglutarate	4.5	H	4.2	<= 6.0

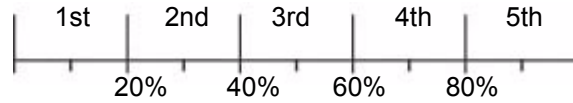
Testing performed by Metamatrix, Inc., 3425 Corporate Way, Duluth, GA 30096

This report is not intended for the diagnosis of neonatal inborn errors of metabolism.

Organix™ Profile Methodology: LC/Tandem Mass Spectroscopy, Colorimetric

Results are expressed as mcg/mg creatinine.
 Ranges are for ages 13 and over

Percentile Ranking by Quintile



95%
Reference
Interval

Cellular Energy

12 Citrate	755 H	622	44 - 1,032
13 Cis-Aconitate	50	54	16 - 86
14 Isocitrate	110 H	105	43 - 157
15 Fumarate	0.12	0.69	<= 1.69

Ketone Body

16 β-Hydroxybutyrate	0.6	2.7	<= 9.7
----------------------	-----	-----	--------

Creatinine = 205 mg/dl

* <DL = less than detection limit



Ordered By:
Robert David PhD

Accession Number: **A0905210218**
Patient: Sample Report
Report Date: 5/21/09
Reprinted: 6/10/2009
Comment:

Testing performed by Metametrix, Inc., 3425 Corporate Way, Duluth, GA 30096

Supplement Recommendation Summary

The Designs for Health - Energy Essentials Profile results may be used, along with full knowledge of this patient's medical history and concerns, to help healthcare professionals create an individually optimized nutritional support program. The summary table below is based strictly on the results from this test. It shows estimates of nutrient doses that may help to normalize nutrient-dependent metabolic functions. All amounts are adult doses that should be adjusted for children according to body weight and indication of need.

These supplement suggestions are based solely on the objective test markers and may serve as a foundational program to optimize metabolic function and address any observed deficiencies. These suggestions may be used in place of supplements the patient was taking at the time the testing was initiated. However, it should not preclude this patient from taking additional supplements as recommended by his/her healthcare provider for other health conditions or requirements unique to the individual.

Recommendations may appear because of secondary associations that are not stated in the Summary section on the first page.

Foundational Metabolic Support

DFH Complete Multivitamin 3 caps daily

Vitamin and Mineral Recommendations

B-Supreme 1 twice daily

Q-Avail 100 1 cap/day

Amino Acid Recommendations

Arginine 1 cap twice daily

Combination Product Recommendations

(1) Amino-D-Tox and/or (2) PaleoCleanse Powder (1) 3 caps twice daily and/or (2) minimum of 2 scoops daily

Inflammatone 2 caps twice daily

Lipoic Acid Supreme 1 cap daily

Ultimate Antioxidant-Full Spectrum 3 soft gels/day

- If orotate is elevated, amino acid supplementation may be contraindicated, except for arginine.
- These guidelines are intended as a starting point for the clinician who requested the test and are based only on the laboratory results included in this report. Final recommendations should be implemented by the clinician with consideration of medical history and current clinical observations.
- These tests are not intended for the diagnosis or treatment of specific disorders.