

Accession #:
Order #:
Reference #:
Patient:
Date of Birth:
Age:
Sex:
Reprinted:
Comment:

Date Collected:
Date Received:
Date of Report:

Telephone:
Fax:



0091 Organix® Comprehensive Profile - Urine

Methodology: LC/Tandem Mass Spectroscopy, Colorimetric

Organix Interpretation

Organix Interpretive Guide is downloadable at: www.metamatrix.com/files/test-menu/interpretive-guides/Organix-IG.pdf



0091 Organix® Comprehensive Profile - Urine

Methodology: LC/Tandem Mass Spectroscopy, Colorimetric

Summary of Abnormal Findings

	<u>Findings</u>	<u>Intervention Options</u>	<u>Common Metabolic Association</u>
Fatty Acid Metabolism			
No Abnormality Found			
Carbohydrate Metabolism			
L-Lactate	Very High	CoQ10, Lipoic Acid, B1, B2, B3, B5	Glucose oxidation
Energy Production Markers			
Citrate	Very Low	Free-form amino acids	Amino Acid insufficiency
Cis-Aconitate	Very Low	Free-form amino acids	Amino Acid insufficiency
Isocitrate	Very Low	Free-form amino acids	Amino Acid insufficiency
B-Complex Vitamin Markers			
Xanthurenate	Very High	B6	Impaired Tryptophan metabolism
Methylation Cofactor Markers			
No Abnormality Found			
Neurotransmitter Metabolism Markers			
Vanilmandelate	Very Low	Tyrosine, Phenylalanine	Epi- & Norepinephrine turnover inhibition
Homovanillate	Low	Tyrosine	Dopamine turnover inhibition
5-Hydroxyindoleacetate	Low	5-HTP	Serotonin turnover inhibition
Picolinate	Very Low	Limit omega-3 PUFA, add protein	Suppressed inflammatory responses
Oxidative Damage and Antioxidant Markers			
No Abnormality Found			
Detoxification Indicators			
Pyroglutamate	Very Low	Free-form amino acids	Amino Acid insufficiency
Bacterial - General			
No Abnormality Found			

Accession #:
Order #:
Reference #:
Patient:
Date of Birth:
Age:
Sex:
Reprinted:
Comment:

Date Collected:
Date Received:
Date of Report:

Telephone:
Fax:



0091 Organix[®] Comprehensive Profile - Urine

Methodology: LC/Tandem Mass Spectroscopy, Colorimetric

L. acidophilus / general bacteria

D-Lactate

Very High

Non D-lactate-forming Probiotics

Intestinal bacterial overgrowth (L. acidophilus)

Clostridial Species

No Abnormality Found

Yeast/Fungal

No Abnormality Found



0091 Organix® Comprehensive Profile - Urine

Methodology: LC/Tandem Mass Spectroscopy, Colorimetric

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

Ranges are for ages 1 - 12

Results
mcg/mg creatinine



95% Reference Range

Nutrient Markers

Fatty Acid Metabolism

(Carnitine & B2)

Item	Result	Quintile Ranking	95% Reference Range
1. Adipate	<DL*	7.5	<= 12.5
2. Suberate	0.85	3.2	<= 8.9
3. Ethylmalonate	1.5	5.5	<= 9.4

Carbohydrate Metabolism

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

Item	Result	Quintile Ranking	95% Reference Range
4. Pyruvate	2.9	4.3	<= 7.5
5. L-Lactate	>LIN** H	15.1	1.4-38.5
6. β-Hydroxybutyrate	1.1	2.2	<= 7.9

Energy Production (Citric Acid Cycle)

(B comp., CoQ10, Amino acids, Mg)

Item	Result	Quintile Ranking	95% Reference Range
7. Citrate	<DL* L	703	59-1276
8. Cis-Aconitate	25 L	77	27-119
9. Isocitrate	50 L	162	63-232
10. α-Ketoglutarate	15	38.0	<= 82.0
11. Succinate	5.6	36.1	<= 61.0
12. Fumarate	0.51	0.69	<= 1.56
13. Malate	0.8	1.9	<= 4.6
14. Hydroxymethylglutarate	2.5	8.9	<= 13.9



0091 Organix® Comprehensive Profile - Urine

Methodology: LC/Tandem Mass Spectroscopy, Colorimetric

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

Ranges are for ages 1 - 12

Results
mcg/mg creatinine



95% Reference Range

B-Complex Vitamin Markers

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

Marker	Result	Quintile Ranking	95% Reference Range
15. a-Ketoisovalerate	0.21	4th (0.29)	<= 0.54
16. a-Ketoisocaproate	0.25	3rd (0.42)	<= 0.63
17. a-Keto-β-methylvalerate	0.35	4th (0.42)	<= 1.12
18. Xanthurenate	0.65 H	5th (0.32)	<= 0.46
19. β-Hydroxyisovalerate	2.6	1st (13.5)	<= 22.5

Methylation Cofactor Markers

(B12, Folate)

Marker	Result	Quintile Ranking	95% Reference Range
20. Methylmalonate	1.1	2nd (2.4)	<= 3.3
21. Formiminoglutamate	0.8	3rd (1.9)	<= 3.2

Cell Regulation Markers

Neurotransmitter Metabolism Markers

(Tyrosine, Tryptophan, B6, antioxidants)

Marker	Result	Quintile Ranking	95% Reference Range
22. Vanilmandelate	<DL* L	1st (2.9) to 5th (6.4)	2.0-8.2
23. Homovanillate	3.2 L	1st (3.3) to 5th (11.3)	2.4-16.7
24. 5-Hydroxyindoleacetate	3.2 L	1st (3.7) to 5th (11.9)	2.6-22.2
25. Kynurenate	0.8	3rd (1.4)	<= 2.3
26. Quinolinatate	2.1	1st (8.0)	<= 12.3
27. Picolinate	3.6 L	1st (16.3)	4.8-28.7

Oxidative Damage and Antioxidant Markers

(Vitamin C and other antioxidants)

Marker	Result	Quintile Ranking	95% Reference Range
28. p-Hydroxyphenyllactate	0.22	4th (0.27)	<= 0.67
29. 8-Hydroxy-2-deoxyguanosine	<DL*	1st (5.9)	<= 8.7

(Units for 8-hydroxy-2-deoxyguanosine are ng/mg creatinine)



0091 Organix® Comprehensive Profile - Urine

Methodology: LC/Tandem Mass Spectroscopy, Colorimetric

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

Ranges are for ages 1 - 12

Results

mcg/mg creatinine



95% Reference Range

Toxicants and Detoxification

Detoxification Indicators

(Arg, NAC, Met, Mg, antioxidants)

Item	Value	Quintile Ranking	95% Reference Range
30. 2-Methylhippurate	0.11	0.122	<= 0.283
31. Orotate	0.44	1.05	<= 1.59
32. Glucarate	4.2	9.1	<= 14.8
33. a-Hydroxybutyrate	<DL*	0.3	<= 0.8
34. Pyroglutamate	25 L	101	34-154
35. Sulfate	2141	1073 - 3191	784-4494

Compounds of Bacterial or Yeast/Fungal Origin

Bacterial - general

Item	Value	Quintile Ranking	95% Reference Range
36. Benzoate	<DL*	2.1	<= 33.6
37. Hippurate	441	667	<= 1271
38. Phenylacetate	0.05	0.14	<= 0.80
39. Phenylpropionate	<DL*		<= 0.06
40. p-Hydroxybenzoate	0.74	2.2	<= 4.0
41. p-Hydroxyphenylacetate	5	24	<= 48
42. Indican	41	64	<= 99
43. Tricarballic acid	0.41	1.18	<= 2.00

L. acidophilus / general bacterial

44. D-Lactate	>LIN** H	2.6	<= 5.6
---------------	----------	-----	--------

Clostridial species

45. 3,4-Dihydroxyphenylpropionate	<DL*		<= 0.12
-----------------------------------	------	--	---------

Yeast / Fungal

46. D-Arabinitol	30	53	<= 92
------------------	----	----	-------

Creatinine = 205 mg/dL

* <DL = less than detection limit

** >LIN = greater than linearity limit



0091 Organix® Comprehensive Profile - Urine

Methodology: LC/Tandem Mass Spectroscopy, Colorimetric

Supplement Recommendation Summary

With knowledge of a patient's full medical history and concerns, the Organix Comprehensive Profile laboratory results may be used to help healthcare professionals create an individually optimized nutritional support program. Based strictly on the results from this test, the summary table below shows estimates of nutrient doses that may help to normalize nutrient-dependent metabolic functions.

The dosage recommendations are for children 6 to 12. Further adjustments for body weight may be needed.

Customized Vitamin and Mineral Formulation

Nutrients listed in this section are normally contained in a multi-vitamin preparation. "Base" amounts may be used to ensure health even when no abnormalities are found.

Customized preparations of the multi-vitamin/mineral formula shown below may be produced by compounding pharmacies.

Nutrient	Daily Amounts	
	Base	Units Added
Vitamin A*	1250 IU	
B-Carotene*	2750 IU	
Vitamin C	125 mg	
Vitamin D*	200 IU	
Vitamin E	50 IU	
Vitamin K*	50 mcg	
Thiamin (B1)	2.5 mg	2.5 mg
Riboflavin (B2)	2.5 mg	5 mg
Niacin (B3)	12.5 mg	10 mg
Pyridoxine (B6)	7.5 mg	40 mg
Folic Acid (or 5-Methyl-THF)	200 mcg	
Vitamin B12	25 mcg	
Biotin	50 mcg	
Pantothenic Acid (B5)	12.5 mg	12.5 mg
Calcium citrate	250 mg	
Iodine*	37.5 mcg	
Magnesium	125 mg	
Zinc*	7.5 mg	
Selenium	50 mcg	
Copper	0.5 mg	
Manganese*	2.5 mg	
Chromium	100 mcg	
Molybdenum*	12.5 mcg	
Boron*	0.5 mg	

* Nutrients with an asterisk are not modified based on the Organix test results.

MM01



0091 Organix® Comprehensive Profile - Urine

Methodology: LC/Tandem Mass Spectroscopy, Colorimetric

Other Items Indicated for individual supplementation

Various conditionally essential nutrients and other potentially beneficial interventions appear in this section only if relevant abnormalities are present. These ingredients are not included in the customized vitamin formula on the previous page.

The dosage recommendations are for children 6 to 12. Further adjustments for body weight may be needed.

Nutrient	Amount
Antibiotics active against <i>L. acidophilus</i>	As needed
5-Hydroxytryptophan	100 mg
Coenzyme Q10	15 mg
Essential Amino Acid Mixture	5 gm
Lipoic Acid	50 mg
Tyrosine	250 mg