

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

Date Collected:  
Date Received:  
Date of Report:  
  
Telephone:  
Fax:



## 0091 Organix<sup>®</sup> 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](http://www.metamatrix.com/files/test-menu/interpretive-guides/Organix-IG.pdf)



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**Summary of Abnormal Findings**

	<u>Findings</u>	<u>Intervention Options</u>	<u>Common Metabolic Association</u>
<b>Fatty Acid Metabolism</b>			
Adipate	High	Carnitine, B2	Fatty acid oxidation
<b>Carbohydrate Metabolism</b>			
No Abnormality Found			
<b>Energy Production Markers</b>			
Citrate	High	Arginine	Renal ammonia loading
Cis-Aconitate	Very High	Arginine	Renal ammonia loading
Isocitrate	Very High	Arginine	Renal ammonia loading
Succinate	High	CoQ10	ATP production
Fumarate	High	CoQ10	ATP production
<b>B-Complex Vitamin Markers</b>			
No Abnormality Found			
<b>Methylation Cofactor Markers</b>			
No Abnormality Found			
<b>Neurotransmitter Metabolism Markers</b>			
Vanilmandelate	High	Evaluate stress issues	Epi- & Norepinephrine turnover stimulation
<b>Oxidative Damage and Antioxidant Markers</b>			
No Abnormality Found			
<b>Detoxification Indicators</b>			
Glucarate	High	N-acetylcysteine, Hepatic support	Hepatic Phase I and II detox
a-Hydroxybutyrate	High	N-acetylcysteine, other sulfur containing amino acids	Glutathione demand
Pyroglutamate	Very High	N-acetylcysteine, other sulfur containing amino acids	Glutathione wasting
<b>Bacterial - General</b>			

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No Abnormality Found

### **L. acidophilus / general bacteria**

No Abnormality Found

### **Clostridial Species**

No Abnormality Found

### **Yeast/Fungal**

D-Arabinitol	High	Antifungals	Yeast Overgrowth
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Ranges are for ages 13 and over

**Results**  
mcg/mg creatinine



**95% Reference Range**

**Nutrient Markers**

**Fatty Acid Metabolism**

*(Carnitine & B2)*

Item	Result	Quintile	95% Reference Range
1. Adipate	6.3 <b>H</b>	5th	<= 11.1
2. Suberate	0.7	2nd	<= 4.6
3. Ethylmalonate	0.9	1st	<= 6.3

**Carbohydrate Metabolism**

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

Item	Result	Quintile	95% Reference Range
4. Pyruvate	2.4	3rd	<= 6.4
5. L-Lactate	2.6	1st	1.6-57.1
6. β-Hydroxybutyrate	<DL*	1st	<= 9.9

**Energy Production (Citric Acid Cycle)**

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

Item	Result	Quintile	95% Reference Range
7. Citrate	814 <b>H</b>	5th	56-987
8. Cis-Aconitate	85 <b>H</b>	5th	18-78
9. Isocitrate	214 <b>H</b>	5th	39-143
10. α-Ketoglutarate	16.0	4th	<= 35.0
11. Succinate	17.3 <b>H</b>	5th	<= 20.9
12. Fumarate	0.68 <b>H</b>	5th	<= 1.35
13. Malate	0.8	3rd	<= 3.1
14. Hydroxymethylglutarate	1.8	1st	<= 5.1



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**95% Reference Range**

### B-Complex Vitamin Markers

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

Marker	Result	Quintile Ranking	95% Reference Range
15. a-Ketoisovalerate	0.16	0.25	<= 0.49
16. a-Ketocaproate	0.12	0.34	<= 0.52
17. a-Keto-β-methylvalerate	0.23	0.38	<= 1.10
18. Xanthurenate	0.21	0.34	<= 0.46
19. β-Hydroxyisovalerate	6.0	7.6	<= 11.5

### Methylation Cofactor Markers

(B12, Folate)

20. Methylmalonate	0.7	1.7	<= 2.3
21. Formiminoglutamate	0.1	1.2	<= 2.2

### Cell Regulation Markers

#### Neurotransmitter Metabolism Markers

(Tyrosine, Tryptophan, B6, antioxidants)

22. Vanilmandelate	4.2	H 1.6 - 3.9	1.2-5.3
23. Homovanillate	3.2	1.9 - 5.7	1.4-7.6
24. 5-Hydroxyindoleacetate	2.1	2.1 - 5.6	1.6-9.8
25. Kynurenate	0.9	1.0	<= 1.5
26. Quinolinatate	1.8	4.0	<= 5.8
27. Picolinatate	2.9	8.0	2.8-13.5

#### Oxidative Damage and Antioxidant Markers

(Vitamin C and other antioxidants)

28. p-Hydroxyphenyllactate	0.31	0.39	<= 0.66
29. 8-Hydroxy-2-deoxyguanosine	1.7	5.3	<= 7.6

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



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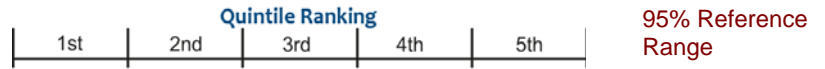
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**Results**

mcg/mg creatinine



### Toxicants and Detoxification

#### Detoxification Indicators

(Arg, NAC, Met, Mg, antioxidants)

Item	Value	Quintile	95% Reference Range
30. 2-Methylhippurate	0.083	4th	<= 0.192
31. Orotate	0.27	2nd	<= 1.01
32. Glucarate	10.1 <b>H</b>	5th	<= 10.7
33. a-Hydroxybutyrate	0.35 <b>H</b>	5th	<= 0.9
34. Pyroglutamate	115 <b>H</b>	5th	28-88
35. Sulfate	958	1st	690-2988

### Compounds of Bacterial or Yeast/Fungal Origin

#### Bacterial - general

Item	Value	Quintile	95% Reference Range
36. Benzoate	<DL*	4th	<= 9.3
37. Hippurate	164	3rd	<= 1070
38. Phenylacetate	<DL*	1st	<= 0.18
39. Phenylpropionate	<DL*	4th	<= 0.06
40. p-Hydroxybenzoate	<DL*	1st	<= 1.8
41. p-Hydroxyphenylacetate	6	1st	<= 34
42. Indican	29	3rd	<= 90
43. Tricarballic acid	0.18	2nd	<= 1.41

#### L. acidophilus / general bacterial

44. D-Lactate	0.5	4th	<= 4.3
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#### Clostridial species

45. 3,4-Dihydroxyphenylpropionate	<DL*	4th	<= 0.05
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#### Yeast / Fungal

46. D-Arabinitol	38 <b>H</b>	5th	<= 73
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Creatinine = 190 mg/dL

\* <DL = less than detection limit

\*\* >LIN = greater than linearity limit



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### 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.

### 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*	2500 IU	
B-Carotene*	5500 IU	
Vitamin C	250 mg	1000 mg
Vitamin D*	400 IU	
Vitamin E	100 IU	300 IU
Vitamin K*	100 mcg	
Thiamin (B1)	5 mg	
Riboflavin (B2)	5 mg	10 mg
Niacin (B3)	25 mg	
Pyridoxine (B6)	15 mg	
Folic Acid (or 5-Methyl-THF)	400 mcg	
Vitamin B12	50 mcg	
Biotin	100 mcg	
Pantothenic Acid (B5)	25 mg	
Calcium citrate	500 mg	
Iodine*	75 mcg	
Magnesium	250 mg	
Zinc*	15 mg	
Selenium	100 mcg	100 mcg
Copper	1 mg	
Manganese*	5 mg	
Chromium	200 mcg	
Molybdenum*	25 mcg	
Boron*	1 mg	

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

MM02



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### 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.

<b>Nutrient</b>	<b>Amount</b>
Potential to benefit from probiotics	Low
Antifungals	As needed
Arginine	500 mg
Carnitine	400 mg
Coenzyme Q10	60 mg
Glycine	4000 mg
N-Acetylcysteine	750 mg
Need for other antioxidants	Moderate