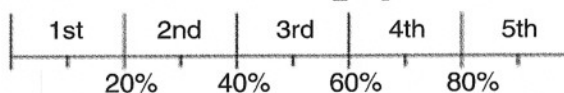


**Organix Comprehensive - Urine**

Methodology: LC/Tandem Mass Spectroscopy, Colorimetric

Results are expressed as mcg/mg creatinine.

Ranges are for ages 12 and under.

**Percentile Ranking by Quintile**95%  
Reference  
Interval**NUTRIENT MARKERS**

Results

**Fatty Acid Metabolism**

(Carnitine &amp; B2)

1 Adipate	3.3	3.7	<= 9.0
2 Suberate	4.5	6.2	<= 13.9
3 Ethylmalonate	10.9 H	10.3	<= 17.5

**Carbohydrate Metabolism**

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

4 Pyruvate	28.1 H	5.3	<= 9.7
5 Lactate	19.6 H	11.3	0.8 - 54.0
6 $\beta$ -Hydroxybutyrate	77.3 H	2.6	<= 14.5

**Energy Production (Citric Acid Cycle)**

(B comp., Q10, Amino acids, Mg)

7 Citrate	1,123 H	1,062	71 - 1,960
8 Cis-Aconitate	181 H	135	43 - 224
9 Isocitrate	166 H	162	57 - 257
10 $\alpha$ -Ketoglutarate	14.9	57.9	3.1 - 127
11 Succinate	> 160.00 H	38.0	0.7 - 99.0
12 Fumarate	6.41 H	0.86	<= 1.96
13 Malate	11.2 H	3.2	<= 6.6
14 Hydroxymethylglutarate	30.3 H	18.6	<= 27.2

**B-Complex Vitamin Markers**

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

15 $\alpha$ -Ketoisovalerate	4.07 H	1.10	<= 2.10
16 $\alpha$ -Ketoisocaproate	< 0.1	0.55	<= 1.00
17 $\alpha$ -Keto- $\beta$ -Methylvalerate	< 0.1	2.0	<= 3.7
18 Xanthurenate	1.57 H	0.90	<= 1.50
19 $\beta$ -Hydroxyisovalerate	26.4 H	15.0	<= 23.9

**Methylation Cofactor Markers**

(B12, Folate)

20 Methylmalonate	0.8	3.5	<= 4.8
21 Formiminoglutamate	1.99 H	0.69	<= 2.24