

Ordering Physician:

Metamatrix

1234 Main St.

Anywhere, GA 30096

Accession Number: **A1201160025**

Reference Number:

Patient: Sample Report

Age: 49 Sex: Female

Date of Birth: 02/05/1962

Date Collected: 1/15/12

Date Received: 1/16/12

Report Date: 1/16/12

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Reprinted: 11/15/12

Comment:

## 0113 Amino Acid Analysis - Bloodspot

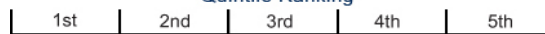
Methodology: High Pressure Liquid Chromatography

Ranges: Ages 13 and over

Results

μmol/L

Quintile Ranking



**95%  
Reference  
Interval**

### Essential Amino Acids

#### Limiting Amino Acids

1 Lysine	121	92	183	63 - 220
2 Methionine	24	12	28	10 - 33
3 Tryptophan	41	28	45	24 - 52

#### Branched Chain Amino Acids

4 Isoleucine	38	35	77	28 - 96
5 Leucine	74	71	139	59 - 162
6 Valine	141	126	229	105 - 266

#### Other Essential Amino Acids

7 Phenylalanine	56	43	72	37 - 86
8 Histidine	26 L	31	84	22 - 99
9 Threonine	116	67	143	54 - 169

#### Conditionally Essential Amino Acids

10 Arginine	27 L	28	71	17 - 91
11 Taurine	143 L	145	245	124 - 282
12 Glycine	394	243	449	207 - 559
13 Serine	171	95	219	79 - 310

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### Functional Categories

#### Vascular Function

Results	Quintile Ranking	95% Reference Interval
μmol/L	1st 2nd 3rd 4th 5th	
14 Arginine 27 <b>L</b>	28 71	17 - 91
15 Taurine 143 <b>L</b>	145 245	124 - 282

#### Neurotransmitters and Precursors

16 Phenylalanine 56	43 72	37 - 86
17 Tyrosine 48	44 85	36 - 99
18 Tryptophan 41	28 45	24 - 52
19 Glutamic Acid 111 <b>L</b>	112 207	97 - 258
20 Taurine 143 <b>L</b>	145 245	124 - 282

#### Sulfur Amino Acids (Glutathione - related)

21 Methionine 24	12 28	10 - 33
22 Taurine 143 <b>L</b>	145 245	124 - 282

#### Urea Cycle and Ammonia Detoxification

23 Arginine 27 <b>L</b>	28 71	17 - 91
24 Citrulline 30	19 41	16 - 51
25 Ornithine 78	68 158	50 - 210
26 Glutamine 379	307 520	209 - 573
27 Asparagine 52	49 77	42 - 88
28 Aspartic Acid 107	44 180	26 - 233

#### Ratios

29 Phenylalanine/Tyrosine 1.17	1.19	<= 1.19
30 Glutamic Acid/Glutamine 0.29	0.26 0.51	0.22 - 0.88
31 Tryptophan/LNAA* 0.122 <b>H</b>	0.061 0.093	0.050 - 0.105

\*Large neutral amino acids (Leu+Ile+Val+Phe+Tyr)

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Methodology: High Pressure Liquid Chromatography

### Amino Acid Formula Recommendation

The table below shows a customized amino acid formula based on the results of your laboratory profile. The formula is optimized by adding amounts shown in the Grams Added column according to the relative positions of results found.

Directions: Adults mix 1 and 1/2 measuring teaspoon (5g) in juice or water 2 times daily between meals as a dietary supplement, or as directed by a health care provider. Children under 12 years old: 3/4 teaspoon 1-2 times daily between meals. Children under 5 years old: Use 1/4 teaspoon, 1-3 times daily; adjust for body weight.

	Grams Added	% of Formula	Active mg/day
L-Arginine HCl (80% active)	14	12.54	1,003
L-Histidine HCl (74% active)	37	21.48	1,590
L-Isoleucine	5	7.96	796
L-Leucine	7	10.98	1,098
L-Lysine HCl (80% active)	1	8.21	657
L-Methionine	0	5.16	516
L-Phenylalanine	0	8.64	864
Taurine	10	3.33	333
L-Threonine	0	5.42	542
L-Tryptophan	0	1.48	148
L-Valine	4	8.90	890
Pyridoxal-5-phosphate	0	0.27	20
Alpha-ketoglutaric acid	0	7.69	569

Total grams added	78
Base Formula amount	222
Total Weight	300

✓ ☐

L-5-Hydroxytryptophan	0	0.49	30
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This formula is intended to optimize essential and conditionally essential amino acid intake. Other non-essential amino acids can be produced in human tissues. Pyridoxal-5-phosphate (an active form of vitamin B6) and alpha-ketoglutaric acid are key factors needed for the body's utilization of amino acids.

The formula may be ordered as a powder that dissolves easily in beverages or may be added to foods such as applesauce. Other forms of supplemental dietary protein or amino acids may need to be restricted while using your customized formula. If enhanced energy levels prevent sleep, avoid bedtime use.

This formula is provided as a starting point that may guide decisions about medical treatment based on the test results. It is derived only from the laboratory results included in this report. Final recommendations should be based on consideration of the patient's medical history and current clinical condition.