

Ordering Physician:
 Metamatrix

1234 Main St
 Anywhere, GA 30096

0113 Amino Acid Analysis - Bloodspot

Methodology: High Pressure Liquid Chromatography

Ranges: Ages 13 and over

Results
 umol/L



**95%
 Reference
 Interval**

Essential Amino Acids

Limiting Amino Acids

Amino Acid	Result (umol/L)	95% Reference Interval
1 Lysine	121	63 - 220
2 Methionine	24	10 - 33
3 Tryptophan	41	24 - 52

Branched Chain Amino Acids

Amino Acid	Result (umol/L)	95% Reference Interval
4 Isoleucine	38	28 - 96
5 Leucine	74	59 - 162
6 Valine	141	105 - 266

Other Essential Amino Acids

Amino Acid	Result (umol/L)	95% Reference Interval
7 Phenylalanine	56	37 - 86
8 Histidine	26 L	22 - 99
9 Threonine	116	54 - 169

Conditionally Essential Amino Acids

Amino Acid	Result (umol/L)	95% Reference Interval
10 Arginine	27 L	17 - 91
11 Taurine	143 L	124 - 282
12 Glycine	394	207 - 559
13 Serine	171	79 - 310

0113 Amino Acid Analysis - Bloodspot

Methodology: High Pressure Liquid Chromatography

Ranges: Ages 13 and over

Functional Categories	Results umol/L		Quintile Ranking					95% Reference Interval
			1st	2nd	3rd	4th	5th	
<u>Vascular Function</u>								
14 Arginine	27	L	28				71	17 - 91
15 Taurine	143	L	145				245	124 - 282
<u>Neurotransmitters and Precursors</u>								
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	L	112				207	97 - 258
20 Taurine	143	L	145				245	124 - 282
<u>Sulfur Amino Acids (Glutathione - related)</u>								
21 Methionine	24		12				28	10 - 33
22 Taurine	143	L	145				245	124 - 282
<u>Urea Cycle and Ammonia Detoxification</u>								
23 Arginine	27	L	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
<u>Ratios</u>								
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	H	0.061				0.093	0.050 - 0.105

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

0113 Amino Acid Analysis - Bloodspot

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

<input checked="" type="checkbox"/> <input type="checkbox"/>	L-5-Hydroxytryptophan	0	0.49	30
--	-----------------------	---	------	----

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.