



Ordering Physician:

John Doe, MD

1234 Main St.  
Anywhere, GA 30096

Accession #: **A1201160011**  
Order #: G1234567  
Reference #:  
Patient: **Sample Report**  
Date of Birth: 02/05/1962  
Age: 49  
Sex: Female  
Reprinted: 07/10/2013  
Comment:

Date Collected: 01/15/2012  
Date Received: 01/16/2012  
Date of Report: 01/16/2012  
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## 0011 Amino Acids 20 Profile - Plasma

*Methodology: High Pressure Liquid Chromatography*

### Amino Acids 20 - Plasma Interpretation

For interpretive information, visit [www.metamatrix.com/files/test-menu/interpretive-guides/Amino-Acids-IG.pdf](http://www.metamatrix.com/files/test-menu/interpretive-guides/Amino-Acids-IG.pdf)

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**0011 Amino Acids 20 Profile - Plasma**

Methodology: High Pressure Liquid Chromatography

Ranges are for ages 13 and over

Results  $\mu\text{mol/L}$       Quintile Ranking      95% Reference Range

1st    2nd    3rd    4th    5th

**Essential Amino Acids**

**Limiting Amino Acids**

Rank	Amino Acid	Result ( $\mu\text{mol/L}$ )	Quintile Range	95% Reference Range
1.	Lysine	168	117 - 203	99-234
2.	Methionine	24	16 - 26	14-30
3.	Tryptophan	37	35 - 59	30-67

**Branched Chain Amino Acids**

Rank	Amino Acid	Result ( $\mu\text{mol/L}$ )	Quintile Range	95% Reference Range
4.	Isoleucine	24 L	40 - 72	33-89
5.	Leucine	74 L	80 - 137	68-161
6.	Valine	182	143 - 240	123-282

**Other Essential Amino Acids**

Rank	Amino Acid	Result ( $\mu\text{mol/L}$ )	Quintile Range	95% Reference Range
7.	Phenylalanine	41 L	43 - 64	39-74
8.	Histidine	52	48 - 72	41-82
9.	Threonine	93	76 - 151	63-181

**Conditionally Essential Amino Acids**

Rank	Amino Acid	Result ( $\mu\text{mol/L}$ )	Quintile Range	95% Reference Range
10.	Arginine	88	48 - 96	37-114
11.	Taurine	60	31 - 73	26-100
12.	Glycine	170	162 - 348	136-430
13.	Serine	69	66 - 115	57-133



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		Results μmol/L	Quintile Ranking					95% Reference Range
			1st	2nd	3rd	4th	5th	
<b>Vascular Function</b>								
14.	Arginine	88						37-114
15.	Taurine	60						26-100
<b>Neurotransmitters and Precursors</b>								
16.	Phenylalanine	41 L						39-74
17.	Tyrosine	57						29-80
18.	Tryptophan	37						30-67
19.	Glutamic Acid	94						23-136
20.	Taurine	60						26-100
<b>Sulfur Amino Acids (Glutathione - related)</b>								
21.	Methionine	24						14-30
22.	Taurine	60						26-100
<b>Urea Cycle and Ammonia Detoxification</b>								
23.	Arginine	88						37-114
24.	Citrulline	37						15-44
25.	Ornithine	52						23-109
26.	Glutamine	378 L						338-630
27.	Asparagine	30						26-56
28.	Aspartic Acid	7.7						4.2-12.5
<b>Ratios</b>								
29.	Phenylalanine/Tyrosine	0.72						<= 1.44
30.	Glutamic Acid/Glutamine	0.25						0.05-0.35
31.	Tryptophan/LNAA*	0.097						0.095-0.106

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



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### 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)	0	8.37	670
L-Histidine HCl (74% active)	2	10.39	769
L-Isoleucine	40	20.03	2,003
L-Leucine	10	12.52	1,252
L-Lysine HCl (80% active)	0	8.37	670
L-Methionine	0	5.48	548
L-Phenylalanine	8	11.85	1,185
Taurine	0	0.00	0
L-Threonine	1	6.10	610
L-Tryptophan	3	2.57	257
L-Valine	0	8.05	805
Pyridoxal-5-phosphate	0	0.27	21
Alpha-ketoglutaric acid	0	7.69	605

Total grams added	64
Base Formula amount	236
Total Weight	300



L-5-Hydroxytryptophan	1	0.72	51
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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.