

Accession Number:

Reference Number:

Patient:

Age: 48 Sex: Female

Date of Birth: 02/05/1962

Date Collected: 1/16/11

Date Received: 1/17/11

Report Date: 1/18/11

Telephone:

Fax:

Reprinted:

Comment:

Amino Acid Analysis - 40 Plasma

Methodology: High Pressure Liquid Chromatography

Ranges: Ages 13 and over

Results
umol/L



95%
Reference
Interval

Essential Amino Acids

Limiting Amino Acids

1. Lysine	148		147	263	120 - 318
2. Methionine	18		17	34	14 - 48
3. Tryptophan	35	L	39	69	31 - 83

Branched Chain Amino Acids

4. Isoleucine	29	L	40	82	35 - 104
5. Leucine	76	L	87	164	74 - 196
6. Valine	161	L	167	316	146 - 370

Other Essential Amino Acids

7. Phenylalanine	45	L	48	77	42 - 95
8. Histidine	73		63	97	57 - 114
9. Threonine	124		88	172	73 - 216

Conditionally Essential Amino Acids

10. Arginine	68		43	107	29 - 137
11. Taurine	39		36	99	29 - 136
12. Glycine	268		192	418	155 - 518
13. Serine	84		74	139	60 - 172

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Functional Categories

Vitamin B6 Status Markers

14. α-aminoadipic acid	<0.5	0.5		<= 1.5
15. α-Amino-n-butyric acid (α-ANB)	10	28		<= 39
16. γ-aminobutyric acid	<0.6	0.6		<= 1.5
17. Cystathionine	<0.2	0.3		<= 0.3

Vascular Function

18. Arginine	68	43	107	29 - 137
19. Taurine	39	36	99	29 - 136
20. α-aminoadipic acid	<0.5	0.5		<= 1.5

Neurotransmitters and Precursors

21. Phenylalanine	45 L	48	77	42 - 95
22. Tyrosine	52	45	87	38 - 110
23. Tryptophan	35 L	39	69	31 - 83
24. Glutamic Acid	42	33	136	24 - 214
25. Taurine	39	36	99	29 - 136

Sulfur Amino Acids (Glutathione - related)

26. Methionine	18	17	34	14 - 48
27. Cystathionine	<0.2	0.3		<= 0.3
28. Homocystine	<0.6	0.6		<= 0.6
29. Cystine	2.6	1.6	16.3	0.8 - 27.5
30. Taurine	39	36	99	29 - 136

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Urea Cycle and Ammonia Detoxification

Item	Results	Quintile Ranking	95% Reference Interval
31. Arginine	68	43 - 107	29 - 137
32. Citrulline	21 L	22 - 45	18 - 57
33. Ornithine	47	36 - 86	28 - 117
34. Glutamine	625	458 - 771	372 - 876
35. Asparagine	43	39 - 71	31 - 90
36. Aspartic Acid	3.4 L	3.5 - 8.6	2.9 - 12.6

Glycine, Serine and Related Amino Acids

Item	Results	Quintile Ranking	95% Reference Interval
37. Alanine	401	284 - 559	230 - 681
38. Glycine	268	192 - 418	155 - 518
39. Sarcosine	9.3	12.1	<= 19.5
40. Serine	84	74 - 139	60 - 172
41. Phosphoserine	<0.5	0.5	<= 0.8
42. Ethanolamine	7.9	9.3	<= 11.6
43. Phosphoethanolamine	3.5	4.6	<= 7.4

Collagen - Related Amino Acids

Item	Results	Quintile Ranking	95% Reference Interval
44. Proline	153	119 - 279	99 - 363
45. Hydroxyproline	12	16	<= 26
46. Lysine	148	147 - 263	120 - 318
47. Hydroxylysine	<0.6	0.6	<= 0.6

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β-Amino Acids and Derivatives

48. β-Alanine	<1	2.8	<= 5.0
49. Histidine	73	63 97	57 - 114
50. Carnosine	3.1	4.8	<= 6.3
51. 1-Methylhistidine	6	37	<= 52
52. Anserine	24	36	<= 43

DNA (Thymine) Degradation

53. β- Aminoisobutyric Acid	<0.3	1.5	<= 3.2
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Muscle-Specific Amino Acids

54. 3-Methylhistidine	4.2	7.2	<= 9.8
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Ratios

55. Phenylalanine/Tyrosine	0.87	1.10	<= 1.10
56. Glutamic Acid/Glutamine	0.07	0.06 0.23	0.06 - 0.23
57. Hydroxyproline/Proline	0.078	0.152	<= 0.152
58. α-ANB/Leucine	0.13	0.22	<= 0.22
59. Tryptophan/LNAA*	0.081	0.080 0.091	0.080 - 0.091

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

These test results in this report are not for the diagnosis of disease. They are intended to provide nutritional guidelines to qualified healthcare professionals with full knowledge of patient history and concerns to assist in their design of an appropriate healthcare program.