



Essential	MW (g/mol)	Conventional Dialysis				Experimental Dialysis			
		Plasma pre ( $\mu\text{M}$ )	Plasma post ( $\mu\text{M}$ )	Reduction ratio	Removed (mg)	Plasma pre ( $\mu\text{M}$ )	Plasma post ( $\mu\text{M}$ )	Reduction ratio	Removed (mg)
Lysine	146.19	179 $\pm$ 29	102 $\pm$ 11	0.42 $\pm$ 0.10	587 $\pm$ 93	192 $\pm$ 55	94 $\pm$ 22	0.49 $\pm$ 0.13	805 $\pm$ 244
Valine	117.15	174 $\pm$ 32	101 $\pm$ 22	0.42 $\pm$ 0.10	416 $\pm$ 117	207 $\pm$ 58	104 $\pm$ 47	0.50 $\pm$ 0.13	627 $\pm$ 288
Leucine	131.18	111 $\pm$ 23	82 $\pm$ 15	0.24 $\pm$ 0.14	412 $\pm$ 92	131 $\pm$ 33	83 $\pm$ 33	0.37 $\pm$ 0.16	664 $\pm$ 252
Phenylalanine	165.19	63 $\pm$ 11	49 $\pm$ 7	0.21 $\pm$ 0.07	332 $\pm$ 101	69 $\pm$ 18	47 $\pm$ 13	0.32 $\pm$ 0.12	468 $\pm$ 241
Threonine	119.12	110 $\pm$ 37	65 $\pm$ 18	0.39 $\pm$ 0.09	276 $\pm$ 97	110 $\pm$ 32	59 $\pm$ 18	0.45 $\pm$ 0.12	335 $\pm$ 129
Isoleucine	131.18	63 $\pm$ 12	43 $\pm$ 15	0.33 $\pm$ 0.16	182 $\pm$ 52	72 $\pm$ 23	45 $\pm$ 23	0.39 $\pm$ 0.17	258 $\pm$ 105
Methionine	149.21	26 $\pm$ 6	17 $\pm$ 3	0.33 $\pm$ 0.23	25 $\pm$ 43	28 $\pm$ 10	15 $\pm$ 6	0.41 $\pm$ 0.27	84 $\pm$ 71
Tryptophan	204.23	11 $\pm$ 3	16 $\pm$ 4	-0.49 $\pm$ 0.20	nd	12 $\pm$ 5	16 $\pm$ 6	-0.39 $\pm$ 0.10	nd
<b>Non Essential</b>									
Glutamine	146.15	591 $\pm$ 68	389 $\pm$ 83	0.33 $\pm$ 0.08	2112 $\pm$ 402	575 $\pm$ 55	356 $\pm$ 84	0.34 $\pm$ 0.13	2444 $\pm$ 525
Glycine	75.07	317 $\pm$ 119	218 $\pm$ 78	0.30 $\pm$ 0.09	564 $\pm$ 162	294 $\pm$ 85	186 $\pm$ 63	0.37 $\pm$ 0.06	620 $\pm$ 196
Alanine	89.1	331 $\pm$ 74	179 $\pm$ 35	0.45 $\pm$ 0.11	592 $\pm$ 191	343 $\pm$ 92	160 $\pm$ 45	0.53 $\pm$ 0.07	738 $\pm$ 297
Proline	115.13	226 $\pm$ 32	131 $\pm$ 21	0.41 $\pm$ 0.12	565 $\pm$ 143	253 $\pm$ 48	129 $\pm$ 35	0.50 $\pm$ 0.07	732 $\pm$ 302
Cystine	121.16	87 $\pm$ 33	25 $\pm$ 9	0.71 $\pm$ 0.06	200 $\pm$ 52	98 $\pm$ 27	19 $\pm$ 7	0.81 $\pm$ 0.07	257 $\pm$ 59
Serine	105.09	74 $\pm$ 18	52 $\pm$ 17	0.30 $\pm$ 0.10	215 $\pm$ 45	79 $\pm$ 26	49 $\pm$ 18	0.35 $\pm$ 0.18	312 $\pm$ 141
Glutamic acid	147.13	67 $\pm$ 21	78 $\pm$ 22	-0.20 $\pm$ 0.26	285 $\pm$ 183	84 $\pm$ 21	87 $\pm$ 26	-0.04 $\pm$ 0.21	379 $\pm$ 204
Arginine	174.2	84 $\pm$ 14	46 $\pm$ 13	0.45 $\pm$ 0.14	293 $\pm$ 90	90 $\pm$ 24	40 $\pm$ 8	0.54 $\pm$ 0.13	370 $\pm$ 150
Histidine	155.16	79 $\pm$ 11	45 $\pm$ 3	0.41 $\pm$ 0.09	264 $\pm$ 25	83 $\pm$ 16	45 $\pm$ 8	0.45 $\pm$ 0.11	334 $\pm$ 77
Tyrosine	181.19	42 $\pm$ 10	29 $\pm$ 7	0.30 $\pm$ 0.12	237 $\pm$ 73	47 $\pm$ 20	28 $\pm$ 9	0.37 $\pm$ 0.12	292 $\pm$ 163
Asparagine	132.12	58 $\pm$ 17	37 $\pm$ 10	0.36 $\pm$ 0.13	82 $\pm$ 68	56 $\pm$ 18	33 $\pm$ 12	0.41 $\pm$ 0.15	81 $\pm$ 67
Aspartic acid	133.1	12 $\pm$ 9	5 $\pm$ 4	nc	47 $\pm$ 9	15 $\pm$ 7	5 $\pm$ 2	nc	86 $\pm$ 45

nd, below limit of measurement; nc, incalculable due to undetectable pre values in one subject