

S1 Table. Tandem Mass Spectrometry variability (CV%) of free L-carnitine and acyl-carnitines estimated on three different concentrations ($\mu\text{mol/L}$) of quality controls.

Marker	Level-1		Level-2		Level-3	
	mean	CV%	mean	CV%	mean	CV%
C0	19.199	9.6	42.538	9.8	65.855	8.8
C2	9.424	16.5	14.178	10.6	39.035	10.3
C3	0.907	16.9	1.231	7.4	12.515	10.8
C3DC	0.059	13.6	0.079	14.8	2.002	10.7
C4:0	0.109	8.2	0.155	12.3	4.476	11.5
C4DC	0.500	14.3	0.590	11.5	2.037	15.4
C4OH	0.057	12.3	0.076	13.0	1.882	9.2
C5:0	0.067	10.0	0.102	15.5	2.576	9.1
C5:1	0.016	32.0	0.021	28.1	0.020	20.2
C5DC	0.015	15.6	0.029	22.4	0.735	9.4
C5OH	0.459	12.7	0.529	9.9	1.847	11.0
C6:0	0.020	10.8	0.029	15.2	1.885	10.2
C8:0	0.023	13.3	0.066	15.5	2.592	7.0
C10:0	0.035	34.0	0.091	18.7	2.337	12.2
C10:1	0.027	52.1	0.079	21.3	0.032	42.7
C12:0	0.017	25.0	0.034	15.2	1.619	9.0
C12:1	0.009	53.2	0.024	21.3	0.011	26.0
C12-OH	0.024	22.2	0.028	23.3	0.022	18.4
C14:0	0.058	9.3	0.085	16.2	2.834	7.7
C14:1	0.023	20.7	0.045	15.8	0.028	14.4
C14:2	0.011	23.7	0.023	17.9	0.013	20.4
C14-OH	0.012	52.4	0.019	55.7	0.022	28.0
C16:0	0.643	15.8	0.751	7.7	9.441	5.2
C16:1	0.034	32.6	0.050	12.1	0.038	27.0
C16-OH	0.020	9.6	0.038	16.4	0.667	12.2
C16:1 OH	0.038	10.1	0.068	15.4	0.054	9.0

C18:0	0.591	10.6	0.718	17.5	5.060	15.1
C18:1	0.869	21.6	1.126	17.1	1.002	18.6
C18:2	0.249	25.1	0.336	12.1	0.289	22.4
C18-OH	0.011	21.6	0.020	20.1	0.986	22.1
C18:1-OH	0.018	18.0	0.028	18.2	0.021	16.5
C18:2 OH	0.023	22.5	0.034	25.2	0.024	20.8
