

Table S1 ¹H Chemical shift assignment of the metabolites in serum from hamsters

Keys	Metabolites	Moieties	$\delta^1\text{H}$ (ppm) and multiplicity ^a
1	Cholesterol	0.84(m)	CH ₃ (C26 and C27)
2	Lipids (mainly HDL)	0.86 (t)	-CH ₃ (CH ₂) _n
3	Lipids (mainly VLDL)	0.88 (t)	CH ₃ CH ₂ CH ₂ C=
4	Lipids(triglycerides and fatty acids)	1.27(m)	CH ₃ (CH ₂) _n
		1.57(m)	CH ₂ CH ₂ CO
		2.01(m)	CH ₂ -C=C
		2.24(m)	CH ₂ -C=O
		2.74(m)	=C-CH ₂ -C=
5	Unsaturated lipids	5.30 (m)	-CH=CH-
6	Isoleucine	1.00(d)	γ CH ₃
		0.93(t)	δ CH ₃
		3.65(dd)	α CH
7	Leucine	0.95(d)	α CH
		0.96(d)	β CH ₂
		1.71(m)	δ CH ₃
		3.72(dd)	δ' CH ₃
8	Valine	0.98(d)	γ CH ₃
		1.03(d)	γ CH ₃
		2.26(m)	β CH
		3.60(d)	α CH
9	3-Hydroxybutyrate	1.19(d)	γ CH ₃
		2.30(dd)	α CH
		2.40(dd)	α CH
		4.15(m)	β CH ₂
10	Lactate	1.32(d)	β CH ₃
		4.11(q)	α CH
11	Alanine	1.47(d)	β CH ₃

		3.76(q)	α CH
12	Acetate	1.91(s)	β CH ₃
13	Methionine	2.13 (s)	δ CH ₂
		2.16(t)	β CH ₂
		2.64(t)	γ CH ₂
		3.87(m)	α CH
14	Acetoacetate	2.27(s)	CH ₃
		3.43(s)	CH ₂
15	Acetone	2.22(s)	CH ₃
16	Glutamine	2.13(m)	β CH ₂
		2.44(m)	γ CH ₂
		3.78(t)	α CH
17	Citrate	2.52(d)	half CH ₂
		2.68(d)	half CH ₂
18	Aspartate	2.66(dd)	half β -CH ₂
		2.80(dd)	half β -CH ₂
		3.89(dd)	α CH
19	Dimethylglycine	2.91(s)	N-CH ₃
20	Creatine	3.03(s)	N-CH ₃
		3.93(s)	CH ₂
21	Choline	3.20 (s)	N-(CH ₃) ₃
22	TMAO	3.26(s)	CH ₃
23	Myo-inositol	3.33(t)	5-CH
		3.53(dd)	1,3-CH
		3.62(t)	4,6-CH
		4.06(t)	2-CH
24	Scyllo-inositol	3.35(s)	CHOH
25	β -Glucose	3.90(dd)	half CH ₂ -C6
26	α -Glucose	5.23(d)	1-CH
27	Glycine	3.55(s)	CH ₂
28	Threonine	1.32(d)	γ CH ₃
		3.60(d)	α CH

		4.23(m)	βCH_2
29	Glucose/amino acids resonances	3.35-3.95	ring protons/ α -CH
30	Urea	5.77(brs)	NH_2
31	Fumaric acid	6.52(s)	CH
32	Tyrosine	6.88(d)	3or5 CH
		7.18(d)	2or6 CH
33	Histidine	7.03(s)	4-CH
		7.74(s)	2-CH
34	Formate	8.45(s)	CH
35	Phenylalanine	7.31(m)	2,6-CH
		7.35(m)	4-CH
		7.40(m)	3,5-CH

^a keys for multiplicity in parenthesis: s, singlet; d, doublet; t, triplet; q, quartet; m, multiplet; dd, doublet of doublet. TMAO: trimethylamine N-oxide.