

**Table S1.** Compounds identified in the polar extract of mouse liver tissue from NMR data : assigned chemical shifts and multiplicities<sup>a</sup>

Compound Name	<sup>1</sup> H NMR Chemical Shift (ppm), Multiplicity, Coupling constants (Hz)
<b>3-Hydroxybutyrate</b>	<b>1.20</b> (d, J=6.4); 2.31 (dd, J=14.3 and 6.1); 2.41 (dd, J=14.3 and 7.6); 4.15 (m)
<b>Acetate</b>	<b>1.93</b> (s)
<b>Alanine</b>	<b>1.48</b> (d, J=7.2); 3.78 (q, J=7.2)
Aspartate	2.68(dd, J=17.6 and 8.4); 2.82(dd, J=17.6 and 3.6); 3.90(m)
<b>Choline</b>	<b>3.21</b> (s); 3.53(m); 4.07(m)
<b>Creatine</b>	<b>3.04</b> (s); 3.93(s)
Ethanol	1.19(t, J=7.1); 3.66(q, J=7.1)
<b>Formate</b>	<b>8.46</b> (s)
<b>Glucose</b>	3.25(dd, J=8 and 9); 3.41(m); 3.48(m); <b>3.54</b> (dd, J=9.5 and 3.6); 3.72(m); 3.77(m); 3.84(m); <b>3.90</b> (dd, J=12.3 and 2.2); 4.65(d, J=7.8); 5.24(d, J=3.7)
<b>Glutamate</b>	2.06(m); 2.12(m); <b>2.36</b> (m); 3.77(m)
<b>Glutamine</b>	2.15(m); <b>2.46</b> (m); 3.78(m)
<b>Glutathione</b>	2.18(m); <b>2.56</b> (m); 2.97(m); 3.29(m); 3.78(m)
<b>Glycerol</b>	3.56(dd, J=11.6 and 6.5); <b>3.66</b> (dd, J=11.6 and 4.3); 3.78(m)
Glycerophosphocholine	3.23(s); 3.62(m); 3.68(m); 3.92(m); 4.33(m)
<b>Glycine</b>	<b>3.56</b> (s)
Inosine monophosphate	4.02(m); 4.38(m); 4.51(m); 6.15(d, J=5.7); 8.24(s); 8.53(s)
<b>Inosine</b>	4.28(m); 4.44(m); <b>6.11</b> (d, J=5.6); 8.24(s); 8.35(s)
<b>Isoleucine</b>	0.94(t, J=6.8); <b>1.015</b> (d, J=6.8); 1.27(m); 1.47(m); 1.99(m); 3.68(d, J=4)
<b>Lactate</b>	1.33(d, J=7); <b>4.11</b> (q, J=7)
<b>Leucine</b>	<b>0.965</b> (t, J=6.4); 1.72(m); 3.74(m)
<b>Methionine</b>	2.12(m); 2.13(s); 2.20(m); <b>2.65</b> (t, J=7.6); 3.86(m)
<b>Niacinamide</b>	8.94(d, J=2); 8.72(dd, J=5 and 2); 8.25(m); <b>7.60</b> (m)
<b>Phenylalanine</b>	3.15(m); 3.29(m); 4.0(m); 7.33(d, J=7.6); 7.38(t, J=7.6); <b>7.43</b> (t, J=7.6)
<b>Succinate</b>	<b>2.42</b> (s)
<b>Taurine</b>	<b>3.27</b> (t, J=6.8); 3.43(t, J=6.8)
<b>Threonine</b>	1.33(d, J=7); 3.60(d, J=4.4); <b>4.26</b> (m)
<b>Tyrosine</b>	3.07(m); 3.20(m); 3.95(m); <b>6.90</b> (d, J=8.4); 7.20(d, J=8.4)
<b>Uridine</b>	4.23(t, J=5.2); 4.36(t, J=5.2); <b>5.91</b> (m); 7.88(d, J=8.2)
<b>Valine</b>	<b>0.99</b> (d, J=7); 1.05(d, J=7); 2.28(m); 3.62(d, J=4.2)

<sup>a</sup>Metabolites quantified and signals used for quantifications are given in bold