

## Supporting Information

Table 1. Phosphatidylethanolamine (PE) species identified in the gastrocnemius of LDLR KO male mice fed either the normal sodium (NS; n = 7) or the low-sodium diet (LS; n = 7). Part 1.

	NS		LS		<i>P</i>
PE (16:0/18:1)	0.2660	± 0.043	0.3312	± 0.021	0.160
PE (16:0/18:2)	0.5750	± 0.161	0.5337	± 0.033	0.898
PE (16:0/20:3)	0.1177	± 0.030	0.0769	± 0.004	0.443
PE (16:0/22:4)	0.9157	± 0.220	0.7426	± 0.025	0.250
PE (16:0/20:4)	1.0722	± 0.283	1.0567	± 0.060	0.701
PE (16:0/22:6)	9.9811	± 2.000	10.5588	± 0.412	0.371
PE (16:0/22:5)	1.4665	± 0.334	1.4272	± 0.058	0.443
PE (16:1/18:0)	0.2301	± 0.061	0.1655	± 0.010	<b>0.021</b>
PE (16:1/22:6)	0.5409	± 0.089	0.5190	± 0.044	1.000
PE (17:0/22:6)	0.3807	± 0.076	0.3498	± 0.038	0.798
PE (18:0/18:1)	0.4524	± 0.567	0.4462	± 0.484	0.898
PE (18:0/18:2)	1.1170	± 0.302	1.0181	± 0.063	0.898
PE (18:0/20:3)	0.1588	± 0.040	0.1582	± 0.012	0.898
PE (18:0/22:4)	0.4470	± 0.112	0.4340	± 0.019	0.701
PE (18:0/20:4)	2.9129	± 0.728	2.8888	± 0.218	0.798
PE (18:0/22:6)	18.6180	± 3.420	20.3365	± 1.290	1.000
PE (18:0/22:5)	3.1309	± 0.580	3.2288	± 0.131	0.798
PE (18:1/18:1)	0.2449	± 0.067	0.3274	± 0.015	0.250
PE (18:1/18:2)	0.3795	± 0.132	0.3642	± 0.027	1.000
PE (18:1/24:0)	0.8638	± 0.020	0.0755	± 0.007	0.701
PE (18:1/20:4)	1.6324	± 0.359	1.7087	± 0.072	0.609
PE (18:1/22:6)	5.6297	± 1.250	5.5887	± 0.281	0.798
PE (18:1/22:5)	0.5764	± 0.092	0.4502	± 0.033	0.201
PE (18:2/18:2)	0.1487	± 0.050	0.1426	± 0.007	0.798
PE (18:2/20:4)	3.3875	± 0.554	2.8658	± 0.407	0.898
PE (18:2/22:6)	2.0812	± 0.438	1.9399	± 0.102	1.000
PE (18:2/22:5)	0.0867	± 0.019	0.0919	± 0.005	0.443
PE (19:0/22:6)	0.1205	± 0.020	0.1534	± 0.010	0.443
PE (20:1/22:6)	0.1607	± 0.036	0.1731	± 0.011	1.000
PE (22:4/22:6)	1.1434	± 0.221	0.8747	± 0.072	0.125
PE (20:4/22:6)	0.19551	± 0.026	0.1416	± 0.010	0.201
PE (22:5/22:6)	0.1532	± 0.021	0.1475	± 0.016	0.798

**Table 2. Plasmalogen Phosphatidylethanolamine (PE) species identified in the gastrocnemius of LDLR KO male mice fed either the normal sodium (NS; n = 7) or the low-sodium diet (LS; n = 7).**

	NS		LS		P
pPE (p16:0/18:1)	0.4826	± 0.066	0.5527	± 0.045	0.160
pPE (p16:0/22:4)	0.3978	± 0.077	0.3537	± 0.013	0.523
pPE (p16:0/20:4)	0.7108	± 0.178	0.7169	± 0.036	0.898
pPE (p16:0/22:6)	10.5008	± 2.560	10.2824	± 0.834	1.000
pPE (p16:0/22:5)	1.5650	± 0.377	1.6925	± 0.113	0.609
pPE (p17:0/18:1)	0.0903	± 0.023	0.1083	± 0.009	0.523
pPE (p18:0/18:1)	0.4128	± 0.477	2.8373	± 0.264	<b>0.011</b>
pPE (p18:0/22:4)	0.4487	± 0.128	0.3978	± 0.022	0.443
pPE (p18:0/20:4)	0.6119	± 0.142	0.5925	± 0.0336	1.000
pPE (p18:0/22:6)	3.5425	± 0.830	3.8973	± 0.223	0.443
pPE (p18:0/22:5)	0.6468	± 0.153	0.7967	± 0.039	0.371
pPE (p18:0:1/16:0)	0.6299	± 0.159	0.6005	± 0.045	0.250
pPE (p18:0:1/18:1)	3.2096	± 0.653	3.3515	± 0.299	0.701
pPE (p18:0:1/18:2)	0.2228	± 0.052	0.2395	± 0.015	0.523
pPE (p18:0:1/20:4)	0.0473	± 0.014	0.0559	± 0.012	0.523
pPE (p18:0:1/22:6)	2.6674	± 0.574	2.6973	± 0.201	1.000
pPE (p18:0:1/22:5)	0.2652	± 0.055	0.2857	± 0.020	0.701
pPE (p18:0:2/18:1)	0.3060	± 0.090	0.3371	± 0.029	0.609
pPE (p18:0:2/22:6)	0.4162	± 0.157	0.4589	± 0.046	1.000
pPE (p20:0/22:6)	0.1266	± 0.041	0.1213	± 0.009	0.898

**Table 3. Phosphatidylglycerine (PG) species identified in the gastrocnemius of LDLR KO male mice fed either the normal sodium (NS; n = 7) or the low-sodium diet (LS; n = 7).**

	NS		LS		P
PG (16:0/18:1)	0,2541	± 0.063	0,3719	± 0.018	0.307
PG (16:0/18:2)	0.0440	± 0.012	0.0571	± 0.002	0.609
PG (16:0/20:4)	0.0156	± 0.003	0.0159	± 0.002	0.609
PG (16:1/18:1)	0.0051	± 0.000	0.0067	± 0.0004	0.097
PG (18:0/18:1)	0.3313	± 0.066	0.3662	± 0.021	0.701
PG (18:0/18:2)	0.2119	± 0.057	0.2283	± 0.081	1.000
PG (18:1/18:2)	0.0499	± 0.014	0.0401	± 0.004	0.898

**Table 4. Sphingomyelin (SM) species identified in the gastrocnemius of LDLR KO male mice fed either the normal sodium (NS; n = 7) or the low-sodium diet (LSD; n = 7).**

	NS		LS		P
SM (d18:0/16:0)	0.0349	± 0.003	0.0325	± 0.004	0.701
SM (d18:1/16:0)	0.3646	± 0.047	0.3721	± 0.044	0.443
SM (d18:1/18:0)	1.5587	± 0.190	1.7683	± 0.136	0.443
SM (d18:1/20:0)	0.2046	± 0.035	0.2388	± 0.026	0.701
SM (d18:1/22:0)	0.5580	± 0.115	0.6716	± 0.062	0.798
SM (d18:1/22:1)	0.0609	± 0.010	0.0642	± 0.007	0.523
SM (d18:1/23:0)	0.1566	± 0.021	0.1609	± 0.017	0.609
SM (d18:1/24:0)	0.6884	± 0.132	0.7956	± 0.087	0.701
SM (d18:1/24:1)	1.3333	± 0.265	1.3824	± 0.161	0.898
SM (d18:1/24:2)	0.1794	± 0.034	0.1872	± 0.027	0.701

**Table 5. Ceramide (Cer) species identified in the gastrocnemius of LDLR KO male mice fed either the normal sodium (NS; n = 7) or the low-sodium diet (LS; n = 7). Part 1.**

	NS			LS			<i>P</i>
<b>1G-Cer (d18:0/20:1-OH)</b>	0.0300	±	0.004	0.0325	±	0.003	0.523
<b>1G-Cer (d18:0/22:0-OH)</b>	0.0303	±	0.0004	0.0334	±	0.0002	0.307
<b>1G-Cer (d18:0/22:1-OH)</b>	0.1615	±	0.027	0.1579	±	0.022	0.701
<b>1G-Cer (d18:0/23:1-OH)</b>	0.0112	±	0.001	0.0097	±	0.001	0.798
<b>1G-Cer (d18:0/24:0-OH)</b>	0.0111	±	0.001	0.0130	±	0.001	0.371
<b>1G-Cer (d18:0/24:1-OH)</b>	0.2865	±	0.043	0.2924	±	0.036	0.609
<b>1G-Cer (d18:0/24:2-OH)</b>	0.0215	±	0.003	0.0195	±	0.002	0.609
<b>1G-Cer (d18:1/22:0-OH)</b>	0.0014	±	0.0004	0.0011	±	0.0002	0.307
<b>1G-Cer (d18:1/23:0-OH)</b>	0.0031	±	0.0006	0.0034	±	0.0005	0.609
<b>1G-Cer (d18:0/24:0)</b>	0.0105	±	0.002	0.0110	±	0.001	0.701
<b>1G-Cer (d18:1/20:0)</b>	0.0101	±	0.001	0.0100	±	0.001	0.701
<b>1G-Cer (d18:1/22:0)</b>	0.0359	±	0.005	0.0328	±	0.005	0.523
<b>1G-Cer (d18:1/23:0)</b>	0.0145	±	0.002	0.0119	±	0.002	0.523
<b>1G-Cer (d18:1/24:0)</b>	0.2028	±	0.032	0.1751	±	0.030	0.701
<b>1G-Cer (d18:1/24:1)</b>	0.1070	±	0.017	0.0970	±	0.016	0.523
<b>1G-Cer (d18:1/24:2)</b>	0.0103	±	0.0017	0.0092	±	0.001	0.798
<b>Sulfatide Cer (d18:1/18:0)</b>	0.0036	±	0.0005	0.0038	±	0.0005	0.125
<b>Sulfatide Cer (d18:1/20:0)</b>	0.0021	±	0.0003	0.0028	±	0.0005	0.097
<b>Sulfatide Cer (d18:1/22:0)</b>	0.0060	±	0.001	0.0060	±	0.0008	0.701
<b>Sulfatide Cer (d18:1/23:0)</b>	0.0019	±	0.0004	0.0021	±	0.0002	0.443

**Table 5. Ceramide (Cer) species identified in the gastrocnemius of LDLR KO male mice fed either the normal sodium (NS; n = 7) or the low-sodium diet (LS; n = 7). Part 2.**

	NS			LS			<i>P</i>
<b>Sulfatide Cer (d18:1/24:0)</b>	0.0355	±	0.005	0.0311	±	0.005	0.701
<b>Sulfatide Cer (d18:1/24:1)</b>	0.0361	±	0.007	0.0321	±	0.005	0.798
<b>Sulfatide Cer (d18:2/24:1)</b>	0.0042	±	0.001	0.0046	±	0.0008	0.307
<b>Sulfatide Cer (d18:1/22:0-OH)</b>	0.0030	±	0.0008	0.0045	±	0.0005	0.201
<b>Sulfatide Cer (d18:1/24:0-OH)</b>	0.0050	±	0.001	0.0063	±	0.0006	0.250
<b>Cer (d18:1/18:0)</b>	0.2088	±	0.040	0.2663	±	0.015	0.443
<b>Cer (d18:1/22:0)</b>	0.0088	±	0.001	0.0112	±	0.0007	0.250
<b>Cer (d18:1/24:0)</b>	0.0093	±	0.002	0.0119	±	0.001	0.160
<b>Cer (d18:1/24:1)</b>	0.0231	±	0.004	0.02652	±	0.002	0.609
<b>Cer (d18:1/24:2)</b>	0.0043	±	0.001	0.00499	±	0.0006	0.201

**Table 6. Diacylglycerol (DG) species identified in the gastrocnemius of LDLR KO male mice fed either the normal sodium (NS; n = 7) or the low-sodium diet (LS; n = 7)**

	NS			LS			<i>P</i>
<b>DG (16:1/18:1)</b>	2.6338	±	0.339	3.6384	±	0.366	0.250
<b>DG (18:2/18:2)</b>	0.9752	±	0.259	1.1888	±	0.216	0.609
<b>DG (18:1/18:2)</b>	3.4143	±	0.524	4.4584	±	0.490	0.371
<b>DG (18:1/18:1)</b>	1.8148	±	0.223	1.9748	±	0.207	0.701

**Table 7. Triglycerides (TG) species identified in the gastrocnemius of LDLR KO male mice fed either the normal sodium (NS; n = 7) or the low-sodium diet (LS; n = 7). Part 1.**

	NS			LS			<i>P</i>
<b>TG (12:0/16:1/18:2)</b>	0,0687	±	0.025	0,0759	±	0.013	1.000
<b>TG (14:0/16:0/16:1)</b>	0,3146	±	0.220	0,3466	±	0.044	0.798
<b>TG (14:0/16:0/18:1)</b>	0,2417	±	0.319	0,5257	±	0.122	0.898
<b>TG (14:0/16:1/18:1)</b>	0,3945	±	0.221	0,4286	±	0.066	0.609
<b>TG (14:0/16:1/16:1)</b>	0,6152	±	0.264	0,7356	±	0.085	0.443
<b>TG (14:0/18:1/18:1)</b>	0,5218	±	0.751	1,6342	±	0.382	0.898
<b>TG (14:0/18:2/18:2)</b>	0,6987	±	0.212	0,9470	±	0.130	0.943
<b>TG (14:1/16:0/16:1)</b>	0,0147	±	0.031	0,0678	±	0.016	1.000
<b>TG (14:1/16:1/18:1)</b>	0,3803	±	0.166	0,5099	±	0.060	0.371
<b>TG (14:1/16:1/18:2)</b>	0,5051	±	0.133	0,6282	±	0.075	0.609
<b>TG (14:1/16:1/16:1)</b>	0,2456	±	0.079	0,2996	±	0.043	0.523
<b>TG (14:1/18:2/18:2)</b>	0,6413	±	0.144	0,8332	±	0.105	0.307
<b>TG (15:0/16:1/18:1)</b>	0,0565	±	0.018	0,0534	±	0.006	0.898
<b>TG (15:0/16:1/18:2)</b>	0,1142	±	0.041	0,1352	±	0.013	0.898
<b>TG (15:0/18:1/18:2)</b>	0,2680	±	0.103	0,3604	±	0.043	0.701
<b>TG (15:0/18:1/18:1)</b>	0,0341	±	0.052	0,1123	±	0.024	0.701
<b>TG (15:0/18:2/18:2)</b>	0,0312	±	0.006	0,0291	±	0.005	1.000
<b>TG (16:0/16:1/17:1)</b>	0,0183	±	0.075	0,1935	±	0.022	0.701
<b>TG (16:0/16:1/18:1)</b>	4,3697	±	2.120	6,6899	±	0.833	0.609
<b>TG (16:0/16:1/22:6)</b>	0,1552	±	0.046	0,2200	±	0.029	0.701
<b>TG (16:0/16:1/16:1)</b>	1,6426	±	0.748	2,2424	±	0.247	0.523
<b>TG (16:0/17:1/18:1)</b>	0,2712	±	0.113	0,3871	±	0.044	0.701
<b>TG (16:0/17:1/18:2)</b>	0,1310	±	0.033	0,1176	±	0.013	0.898
<b>TG (16:0/18:0/18:1)</b>	0,4230	±	0.390	0,5933	±	0.082	0.898
<b>TG (16:0/18:0/18:2)</b>	0,7326	±	1.010	2,1276	±	0.531	0.701
<b>TG (16:0/18:1/18:2)</b>	6,1253	±	2.700	9,2644	±	1.170	0.609
<b>TG (16:0/18:1/19:1)</b>	0,0517	±	0.060	0,1091	±	0.022	0.701

**Table 7. Triglycerides (TG) species identified in the gastrocnemius of LDLR KO male mice fed either the normal sodium (NS; n = 7) or the low-sodium diet (LS; n = 7). Part 2.**

	NS			LS			<i>P</i>
TG (16:0/18:1/20:1)	0.4536	±	0.460	0.8374	±	0.238	0.798
TG (16:0/18:1/22:6)	0.1398	±	0.046	0.211	±	0.031	0.443
TG (16:0/18:1/18:1)	5.3333	±	1.730	7.4239	±	0.926	1.000
TG (16:0/18:2/22:4)	0.0415	±	0.040	0.0929	±	0.025	0.609
TG (16:0/18:2/22:6)	0.1733	±	0.040	0.2911	±	0.025	0.371
TG (16:0/18:2/18:2)	0.3569	±	0.474	1.0290	±	0.303	0.701
TG (16:0/16:0/16:1)	1.0012	±	0.756	1.1728	±	0.171	0.798
TG (16:0/16:0/18:1)	2.0052	±	1.670	2.9952	±	0.400	1.000
TG (16:0/16:0/16:0)	0.1914	±	0.107	0.3591	±	0.048	0.371
TG (16:1/17:1/18:2)	0.2188	±	0.070	0.3100	±	0.033	0.898
TG (16:1/18:1/18:2)	8.6219	±	2.700	12.0870	±	1.170	0.609
TG (16:1/18:1/18:1)	2.7634	±	0.778	3.0303	±	0.393	0.609
TG (16:1/18:2/18:3)	0.6249	±	0.173	0.9371	±	0.139	0.307
TG (16:1/18:2/22:5)	0.0119	±	0.010	0.0350	±	0.010	0.443
TG (16:1/18:2/18:2)	5.9665	±	1270	6.6006	±	0.853	0.523
TG (16:1/16:1/17:1)	0.0622	±	0.017	0.0853	±	0.011	0.798
TG (16:1/16:1/18:1)	6.8728	±	1.830	8.5875	±	0.829	0.701
TG (16:1/16:1/18:2)	4.1106	±	0.840	4.6548	±	0.515	0.609
TG (16:1/16:1/18:3)	0.1380	±	0.036	0.1578	±	0.029	0.609
TG (16:1/16:1/20:4)	0.5831	±	0.102	0.5774	±	0.081	0.201
TG (16:1/16:1/16:1)	1.9518	±	0.507	2.4398	±	0.283	0.609
TG (17:0/18:1/18:2)	0.0364	±	0.044	0.0955	±	0.021	0.701
TG (17:1/18:1/18:2)	0.2894	±	0.094	0.3623	±	0.042	0.898
TG (17:1/18:1/18:1)	0.3099	±	0.104	0.3808	±	0.043	0.701
TG (17:1/18:2/18:2)	0.1250	±	0.038	0.1698	±	0.019	0.898
TG (18:0/18:1/18:2)	0.0446	±	0.011	0.0448	±	0.007	1.000
TG (18:0/18:1/18:1)	0.7749	±	0.309	0.9041	±	0.114	0.898
TG (18:1/18:2/18:3)	0.8532	±	0.199	1.1533	±	0.125	0.250
TG (18:1/18:2/19:1)	0.0889	±	0.034	0.0958	±	0.012	0.898
TG (18:1/18:2/20:1)	0.2874	±	0.137	0.3563	±	0.052	0.798
TG (18:1/18:2/20:2)	0.1743	±	0.066	0.2608	±	0.035	0.443
TG (18:1/18:2/20:3)	0.1834	±	0.074	0.2137	±	0.036	0.798
TG (18:1/18:2/22:4)	0.0979	±	0.037	0.1202	±	0.021	0.701
TG (18:1/18:2/20:4)	0.4301	±	0.127	0.5883	±	0.076	0.701

