

**Supplemental Table S1: Gene expression change from baseline to end of study in SYSDIET relative to control group.**

<b>Gene</b>	<b>Estimate</b>	<b>95% CI</b>	<b>P-value</b>	<b>FDR</b>
<i>ABCA1</i>	0.321707	(-0.06 - 0.71)	0.101	0.590
<i>ABCG1</i>	-0.0868	(-0.49 - 0.32)	0.671	0.801
<i>CCL2</i>	0.119038	(-0.41 - 0.65)	0.655	0.801
<i>CCL5</i>	0.079275	(-0.28 - 0.44)	0.660	0.801
<i>CCR2</i>	0.324836	(-0.06 - 0.71)	0.096	0.590
<i>CCR4</i>	0.072374	(-0.32 - 0.46)	0.714	0.801
<i>CD36</i>	-0.22348	(-0.58 - 0.13)	0.210	0.590
<i>CD40</i>	-0.30838	(-0.7 - 0.08)	0.122	0.590
<i>CD40LG</i>	-0.24171	(-0.57 - 0.09)	0.147	0.590
<i>CPT1A</i>	-0.15937	(-0.56 - 0.24)	0.427	0.705
<i>CPT1B</i>	-0.18168	(-0.7 - 0.34)	0.490	0.735
<i>CRAT</i>	-0.06342	(-0.42 - 0.29)	0.721	0.801
<i>CXCR2</i>	0.370024	(-0.03 - 0.77)	0.067	0.590
<i>HMGCR</i>	-0.20361	(-0.53 - 0.12)	0.218	0.590
<i>ICAM1</i>	-0.09487	(-0.43 - 0.24)	0.578	0.782
<i>IFNG</i>	-0.23788	(-0.65 - 0.17)	0.252	0.590
<i>IKBKB</i>	0.272156	(-0.12 - 0.66)	0.166	0.590
<i>IL18</i>	-0.40786	(-1.03 - 0.22)	0.199	0.590
<i>IL1B</i>	0.210775	(-0.28 - 0.7)	0.391	0.705
<i>IL1RN</i>	-0.13093	(-0.47 - 0.2)	0.438	0.705
<i>IL23A</i>	-0.05431	(-0.38 - 0.28)	0.744	0.801
<i>IL23R</i>	0.07138	(-0.35 - 0.49)	0.735	0.801
<i>IL6</i>	0.136603	(-0.29 - 0.57)	0.530	0.742
<i>IL8</i>	0.64915	(-0.15 - 1.45)	0.110	0.590
<i>LDLR</i>	-0.02874	(-0.36 - 0.3)	0.863	0.884
<i>MMP9</i>	0.309196	(-0.29 - 0.91)	0.308	0.616
<i>NAMPT</i>	-0.22543	(-0.63 - 0.18)	0.275	0.590
<i>NFKBIA</i>	-0.17952	(-0.49 - 0.13)	0.249	0.590
<i>PDGFA</i>	-0.26867	(-0.68 - 0.15)	0.200	0.590
<i>PDGFB</i>	-0.29906	(-0.64 - 0.04)	0.087	0.590
<i>PDK4</i>	-0.14372	(-0.48 - 0.19)	0.397	0.705
<i>PLIN2</i>	-0.17631	(-0.5 - 0.15)	0.281	0.590
<i>PPARA</i>	0.108198	(-0.22 - 0.44)	0.515	0.742
<i>PPARD</i>	-0.11639	(-0.42 - 0.19)	0.453	0.705
<i>RELA</i>	0.414439	(0.08 - 0.75)	0.016	0.345
<i>SREBF1</i>	0.221734	(-0.35 - 0.79)	0.442	0.705
<i>TGFB2</i>	0.048171	(-0.42 - 0.52)	0.840	0.882
<i>TLR4</i>	0.007217	(-0.33 - 0.35)	0.966	0.966
<i>TNF</i>	-0.20531	(-0.58 - 0.16)	0.273	0.590
<i>TNFRSF1A</i>	-0.51981	(-0.87 - -0.17)	0.004	0.186
<i>TNFRSF1B</i>	0.059178	(-0.28 - 0.4)	0.727	0.801
<i>UCP2</i>	-0.27445	(-0.65 - 0.1)	0.146	0.590

Difference between SYSDIET and control group analysed with a linear regression model, adjusted for age, sex and study center.



**Figure S1.** Gene expression changes (deltaCt) in the ND group at baseline and end of study.  $\Delta Ct$  was calculated as  $Ct_{(reference\ gene)} - Ct_{(target)}$ , and the log ratio ( $\Delta\Delta Ct$ ) was calculated as  $\Delta Ct_{(end\ of\ study)} - \Delta Ct_{(baseline)}$ . Differences between the time points are tested with a paired *t*-test. *p*-values < 0.05 were considered significant.



**Figure S2.** Gene expression changes (deltaCt) in the CD group at baseline and end of study.  $\Delta Ct$  was calculated as  $Ct_{(reference\ gene)} - Ct_{(target)}$ , and the log ratio ( $\Delta\Delta Ct$ ) was calculated as  $\Delta Ct_{(end\ of\ study)} - \Delta Ct_{(baseline)}$ . Differences between the time points are tested with a paired *t*-test. *p*-Values < 0.05 were considered significant.