Electronic Supplementary Material (ESI) for Food & Function.

Supplemental tables

Table S1 Primer sequence used in real-time PCR

Gene name	Primer sequence
CPT1α	F-5'-GGAGAGGAGACAGACACCATCCA-3'; R-5'-CAAAATAGGCCTGACGACACCTG-3'
NQO-1	F-5'-TGGAGTCCCTGCCATTCT-3'; R-5'-AGCACTGCCTTCTTACTC-3'
HMOX-1	F-5'-AAGACTGCGTTCCTGCTCAA-3'; R-5'-AAAGTTCATGGCCCTGGGAG-3'
GSTT2	F-5'-TGACACTGGCTGATCTCATGGCC-3'; R-5'-GCCTCCTGGCATAGCTCAGCAC-3'
ACACA	F-5'-GCCATGTTATTGCTGCTCGG-3'; R-5'-ACCCCGAATAGACAGCTCCT-3'
ABCA1	F-5'-AAGGAACTAGTCCCGGCAAA-3'; R-5'CGTGGCTGGTCATTAACGTTT-3'
APOA	F-5'-TTGCCCACTCTATTTGCCCA-3'; R-5'-GTGGGGGACCTCCTTCTCG-3'
Rpl30	F- 5'-GTGGGAGCTCCTTCCTTTCTC -3'; R-5'-GACTTTTTCGTCTTCTTTGCGG-3'
Srebp1c	F-5'-GGAGCCATGGATTGCACATT-3'; R-5'-GCTTCCAGAGAGGAGGCCAG-3'.
Abca1	F-5'-TGCCACTTTCCGAATAAGC-3'; R-5'-GGAGTTGGATAACGGAAGCA-3'
Scd1	F-5'-CACCTGCCTCTTCGGGATTT-3'; R-5'- CTTTGACAGCCGGGTGTTTG-3'.

Table S2 Hepatic gene expression in LF-, WD+G-, and WD+D- fed mice relative to WD[a]

	LF/WD		WD+G/WD		WD+D/WD	
Symbol	**Fold Change**	***p* value**	**Fold Change**	***p* value**	**Fold Change**	***p* value**
Gsta1	0.01	0.002	0.1	0.02	0.5	0.2
Gstm2	0.3	0.0007	0.2	0.002	0.3	0.01
Cebpb	1.1	0.5	0.3	0.01	0.3	0.01
Acaa1a	0.6	0.02	0.4	0.02	0.6	0.2
Pdk4	1.9	0.3	0.4	0.1	0.7	0.3
Elovl5	1.	1.0	0.4	0.09	0.5	0.2
Cyp2b10	0.1	0.007	0.5	0.1	0.7	0.5
Fads2	1.2	1.0	0.5	0.09	0.7	0.3
Ikbkb	1.04	0.5	0.5	0.03	0.6	0.05
Abcb1a	0.4	0.02	0.6	0.3	0.9	0.7
Acox1	0.8	0.3	0.7	0.1	1.03	0.7
Cebpa	1.2	0.8	0.7	0.1	0.7	0.2
Abcc4	0.6	0.2	0.8	0.4	1.2	0.8
Slco10a2	0.6	0.2	0.8	0.3	1.2	0.5
Cyp2c29	0.5	0.002	0.8	0.1	0.9	0.5
Cpt1a	0.8	0.5	0.8	0.2	0.9	0.4
Fads1	2.1	0.1	0.8	0.3	0.6	0.3
Pklr	1.4	0.08	0.8	0.3	0.6	0.05
Fasn	1.6	0.2	0.9	0.5	1.2	0.8
Abcb4	0.8	0.2	0.9	0.3	1.4	0.3
Tgfb1	0.8	0.2	0.9	0.5	1.2	0.7
Cyp4a14	1.08	0.7	0.9	0.9	4.01	0.05
Nqo1	0.4	0.005	0.9	0.6	1.8	0.04
Abcc2	0.8	0.4	0.9	0.5	1.2	0.9
Pex16	1.06	0.9	0.9	0.4	1.05	0.7
Sptlc2	0.6	0.01	0.9	0.5	1.2	0.5
Bcl3	1.2	1.0	0.9	0.3	1.0	0.3
Abcc3	0.4	0.02	0.9	0.6	1.3	0.5
Aldh1a1	0.6	0.1	0.9	0.5	2.0	0.2
Ldlr	1.5	0.2	1.0	0.5	1.01	0.7
Bmp4	1.6	0.1	1.0	0.6	1.3	0.7
Elovl2	1.7	0.04	1.0	0.6	0.8	0.2
Lpl	0.6	0.8	1.0	0.9	1.9	0.01
Lasp1	1.2	0.7	1.1	1.0	1.3	0.7
Mmp2	1.6	0.4	1.2	0.8	1.4	0.9
Cxcl1	0.5	0.003	1.2	0.2	1.2	0.3
Crp	0.9	0.8	1.2	0.4	1.2	0.3
Cyp3a11	0.5	0.005	1.2	0.5	2.07	0.0005
Ppargc1b	2.0	0.008	1.2	0.9	1.4	0.5
Nqo2	0.7	0.04	1.2	0.3	1.3	0.2
Srebf1	0.7	0.1	1.2	0.8	2.02	0.05
Apoe	0.8	0.2	1.3	1.0	1.7	0.3
Acly	1.9	0.1	1.3	0.7	1.09	0.9
Fabp1	1.2	0.2	1.4	0.06	1.6	0.0006
Gck	0.5	0.05	1.4	0.3	1.8	0.03
Pygl	0.9	0.7	1.4	0.02	1.4	0.04
Ccl5	0.7	0.04	1.5	0.2	2.8	0.01
Hmgcr	2.7	0.0006	1.5	0.09	1.3	0.3
Abcb11	1.05	0.7	1.5	0.1	1.6	0.1
Apob	1.0	0.9	1.5	0.09	2.04	0.002
Crebbp	1.3	0.2	1.6	0.04	1.9	0.004
Ptgs1	0.9	0.4	1.7	0.09	1.9	0.01
Fgf21	0.9	0.7	1.8	0.4	5.08	0.01
Abcg5	0.4	0.006	1.8	0.06	1.8	0.06
Baat	0.7	0.5	1.8	0.02	2.2	0.002
Slco10a1	1.6	0.03	2.007	0.0004	1.5	0.02
Sirt5	1.07	0.9	2.01	0.1	2.9	0.007
Scd1	0.5	0.02	2.06	0.003	2.2	0.003
Ppargc1a	1.4	0.06	2.09	0.005	2.2	0.002
Col3a1	0.7	0.9	2.3	0.1	4.5	0.003
Cited2	1.0	1.0	2.3	0.001	2.8	0.0002
Msr1	1.0	1.0	2.3	0.003	3.05	0.00001

Slco1a4	1.0	0.8	2.4	0.007	1.2	0.9
Ccl2	0.2	0.005	2.5	0.02	4.8	0.007
Creb1	0.9	0.6	2.7	0.00007	3.1	0.000004
Pck1	1.3	0.2	2.8	0.002	3.2	0.09
Sult5a1	1.09	0.9	2.8	0.008	3.6	0.0001
Sirt1	1.2	0.4	3.0	0.0001	3.3	0.000009
Abca1	1.04	0.7	3.0	0.00005	4.01	0.00001
Alox8	0.9	0.2	3.06	0.002	4.1	0.1
Hmox1	0.7	0.7	3.1	0.0006	4.5	0.00000001
Slco1a1	2.3	0.003	3.4	0.000003	2.3	0.03
Ptges2	1.5	0.1	3.4	0.000005	3.5	0.000005
Ephx1	0.7	0.7	3.5	0.001	5.2	0.00005
Crtc2	2.2	0.09	3.6	0.001	4.8	0.00004
Creb3l2	1.4	0.2	3.8	0.007	4.5	0.0002
Cyp27a1	1.7	0.2	4.0	0.0007	4.4	0.0005
Apoa1	1.4	0.4	4.1	0.001	4.9	0.0002
Nos3	1.2	0.7	4.5	0.20	4.7	0.2
Socs3	5.3	0.0004	5.0	0.03	4.9	0.02
Abcg2	1.1	0.9	5.8	0.007	8.6	0.0004
Acaca	1.8	0.09	6.04	0.0002	6.9	0.0002
Cyp8b1	2.9	0.07	6.6	0.003	9.7	0.0009
Cyp7a1	0.5	0.2	7.0	0.00002	7.0	0.000004
Cyp1a2	2.0	0.2	8.5	0.000009	8.5	0.000009
Hsl	2.9	0.07	8.9	0.000006	19.3	0.000000001
Cd14	0.8	0.6	10.4	0.00000001	11.5	0.00005

[a]Fold change and *p* value are shown. *Rpl30* gene was set as the control gene.

Table S3 Relative expression of LXR regulated mRNAs in mice fed genistein or daidzein[a]

	LF/WD	G/WD	D/WD
Abca1	1.0	3.0	4.0
Abcg5	0.4	1.8	1.8
Acaca	1.8	6.0	6.9
Apoa1	1.3	4.1	4.9
Apob	1.0	1.5	2.0
Apoe	0.8	1.3	1.6
Cd14	0.8	10.4	11.4
Cyp7a1	0.5	7.0	7.0
Fasn	1.6	0.8	1.2
Hmgcr	2.7	1.5	1.3
Ldlr	1.5	0.9	1.0
Lpl	0.6	1.1	1.9
Msr1	1.0	2.3	3.1
Scd1	0.5	2.1	2.2
Srebf1	0.7	1.2	2.0

[a]The fold change is displayed for genes that were significantly changed compared to the WD control group. Shades of red and green indicate the degree of upregulation or downregulation, compared to WD- fed mice, respectively.