Supplementary Table 1: Genotypic association of 16 candidate SNPs with Liver fat fraction and metabolic parameters.

Gene	SNP	Functional annotation	Allele			Genotype Count	Phenotypic Association			
			A1 (minor)	A2 (major)	MAF	(A1/A1, A1/A2, A2/A2)	Phenotype	Effect allele	Beta ± SE (95% LCI, UCI)	P-value
LYPLAL1	rs12137855		T	C	0.28	3/19/21				
GCKR	rs780094	intron	T	C	0.33	3/22/18	HbA1c	T	0.036±0.013 (0.006,0.064)	0.021*
							Liver fat	T	0.705±0.29 (0.14,1.27)	0.019*
							Triglyceride	T	0.242±0.1 (0.041,0.44)	0.023*
PPAR gamma	rs1805192	missense	-	C	0.00	0/0/43				
FDFT1	rs2645424	intron	A	G	0.44	8/20/14				
PPP1R3B	rs4240624	intron	G	A	0.09	0/8/35				
COL13A1	rs1227756	intron	G	A	0.45	10/19/14				
TCF7L2	rs7903146	intron	T	C	0.30	3/19/21	Liver fat	T	-0.553±0.23	0.023#

										(-1.01,-0.096)	
APOC3	rs2854116	near-gene-5'	C	T	0.39	5/23/15					
APOC3	rs2854117	near-gene-5'	T	C	0.24	0/20/23					
EFCAB4B	rs887304	intron,untranslated-3'	A	G	0.26	4/15/24					
SREBF-1c	rs11868035	near-gene 3', untranslated-3'	T	C	0.28	3/16/20	Triglyceride	T		-0.189±0.081 (-0.35,-0.031)	0.025[#]
PEMT	rs7946	missense	G	A	0.22	3/13/27					
NCAN	rs2228603	missense	T	C	0.11	1/8/34	2hr Glucose	T		0.159±0.06 (0.03,0.28)	0.018[*]
PPAR alpha	rs1800234	missense	-	T	0.00	0/0/43					
PNPLA3	rs6006460	missense	-	G	0.00	0/0/43					
PNPLA3	rs738409	missense	G	C	0.23	3/13/27					

MAF, Minor allele frequency; SNP, Single nucleotide polymorphism; *p value from dominant genetic model, [#] p value from additive genetic model.

SE; standard error of beta, UCI and LCI, upper and lower confidence interval of beta.