

Shared Ancestral Susceptibility to Colorectal Cancer and other Nutrition Related Diseases

Authors:

Stefanie Huhn^{a,1}, Melanie Bevier^a, Anja Rudolph^b, Barbara Pardini^c, Alessio Naccarati^c, Rebecca Hein^{b,*}, Michael Hoffmeister^d, Ludmila Vodickova^{c,e}, Jan Novotny^f, Hermann Brenner^d, Jenny Chang-Claude^b, Kari Hemminki^{a,g}, Pavel Vodicka^{c,e}, Asta Försti^{a,g}

Affiliations:

^a Department of Molecular Genetic Epidemiology, German Cancer Research Center (DKFZ), Heidelberg, 69120, Germany

^b Division of Cancer Epidemiology, German Cancer Research Center (DKFZ), Heidelberg, 69120, Germany

^c Institute of Experimental Medicine, Academy of Sciences of the Czech Republic, Prague 4, 14200, Czech Republic

^d Division of Clinical Epidemiology and Aging Research, German Cancer Research Center (DKFZ), Heidelberg, 69120, Germany

^e Institute of Biology and Medical Genetics, 1st Faculty of Medicine, Charles University, Prague 2, 12000, Czech Republic

^f Department of Oncology, General Teaching Hospital, Prague, 12808, Czech Republic

^g Center of Primary Health Care Research, Clinical Research Center, Lund University, Malmö, SE-20502, Sweden

¹ Corresponding Author

Stefanie Huhn

German Cancer Research Center (DKFZ); Department of Molecular Genetic Epidemiology

Im Neuenheimer Feld 580; 69120 Heidelberg; Germany

phone: +49 6221 42 1803; fax: +49 6221 42 1810

email: s.huhn@dkfz.de

* Current Affiliation of Rebecca Hein: PMV Forschungsgruppe, University of Cologne, Germany

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Introduction to the table

The study focused on SNPs, for which ancestral alleles have previously been associated with nutrition-related complex diseases other than CRC, such as obesity, T2D and metabolic syndrome. Information about such SNPs was collected from 30 published reports by browsing the PubMed database (<http://www.ncbi.nlm.nih.gov/sites/entrez?db=pubmed>) for the keywords “diabetes”, “obesity”, “metabolic syndrome” (OMIM ID: 605552) and “hypertension” (OMIM ID: 145500) up to 06/2009. Most of the articles were based on genome-wide association studies or were meta-analyses. A complete list of the publications can be found at the reference list of the additional file1.

Out of these 30 reports, associations with the risk of the diseases and with the related quantitative traits were retrieved. The quantitative traits for diabetes were fasting glucose level and insulin resistance. For obesity, the traits were body mass index (BMI) and waist to hip ratio. The quantitative traits for hypertension and the metabolic syndrome were high-density lipoprotein (HDL) level, low-density lipoprotein (LDL) level, triglycerides level, salt sensitivity, blood pressure and insulin resistance. A complete list of the reported associations can be found the additional file1.

Additional file1: Table I. Information about genes and SNPs considered as candidates for the case-control study.

Closest Gene (GenBank ID)	rs	Chr	Position	SNP (AD)	Risk on A or D	Associated Disease/Trait ^a (OMIM ID)	Function or Location	Source
<i>ABCA1</i>	rs4149274	09q31.01	106.679.485	AG	A	HDL	intron	[1]
<i>ABCA1</i>	rs4149268	09q31.01	106.687.291	TC	A	HDL	intron	[1]
<i>ABCA1</i>	rs1883025	09q31.01	106.704.372	TC	A	HDL	intron	[2]
<i>ABCG8</i>	rs6544713	02p21.00	43.927.635	CT	D	LDL	intron	[2]
<i>ACE</i>	in intron 16	17q23.03		Alu indel	A	HT	intron	[3]
<i>ADAMTS9</i>	rs4607103	03p14.01	64.687.194	CT	A	T2D	ADAMTS9 ~35kb up	[4]
<i>ADD1</i>	rs4961	04p16.03	2.876.755	GT	A	HT	missense	[3]
<i>ADRB2</i>	rs1042714	05q33.01	148.186.916	GC	A	OB	missense	[3]
<i>ADRB3</i>	rs4994	08q12.00	37.943.205	CT	A	BMI, OB, T2D	missense	[3]
<i>AGT</i>	rs699	01q22.02	228.912.667	CT	A	HT	missense	[3, 5]
<i>AGT</i>	rs4762	01q22.02	228.912.850	CT	A	HT	missense	[3, 5]
<i>AGT</i>	rs5051	01q22.02	228.916.745	AG	A	HT	5'UTR	[3, 5]
<i>AH11</i>	rs1535435	06q23.03	135.798.965	AG	A	T2D	intron	[6]
<i>APOA1-APOC3-APOA4-APOA5; ZNF259</i>	rs964184	11q23.03	116.154.377	CG	D	HDL, TG	APOA5 ~11kb down; ZNF259 ~100bp down	[1, 2]
<i>APOA1-APOC3-APOA4-APOA5; ZNF259</i>	rs12286037	11q23.03	116.157.667	CT	D	TG	APOA5 ~9kb down; intron ZNF259	[1]
<i>APOA5/A4/C3/A1</i>	rs486394	11q23.03	116.031.782	AC	D	TG	APOA5 ~134kb down;	[1]
<i>APOA5/A4/C3/A1</i>	rs2000571	11q23.03	116.090.993	GA	D	TG	APOA5 ~74kb down;	[1]
<i>APOA5/A4/C3/A1</i>	rs662799	11q23.03	116.169.167	AG	D	TG	APOA5 ~800bp up	[1]
<i>APOB</i>	rs7557067	02p24.01	21.061.967	AG	A	TG	~16kb up of APOB	[2]
<i>APOB</i>	rs693	02p24.01	21.085.950	CT	D	LDL, CAD	~35kb up	[1, 7]
<i>APOB</i>	rs1713222	02p24.01	21.125.078	CT	A	LDL	~21kb down of APOB	[7]
<i>APOB</i>	rs7575840	02p24.01	21.127.245	GT	D	LDL	~7kb down	[7]
<i>APOB</i>	rs515135	02p24.01	21.139.812	CT	A	LDL	~21kb down of APOB	[1, 2]
<i>APOB</i>	rs562338	02p24.01	21.142.076	CT	D.A.	LDL	~22kb down	[1, 7]
<i>APOB</i>	rs754523	02p24.01	21.165.446	AG	D	LDL, CAD	~45kb down	[1]
<i>APOB</i>	rs4560142	02p24.01	21.237.472	TC	A	LDL	~21kb down of APOB	[7]
<i>APOB</i>	rs4591370	02p24.01	21.237.497	GA	A	LDL	~21kb down of APOB	[7]
<i>APOB</i>	rs538928	02p24.01	21.242.774	AG	D	LDL	~122kb down	[7]
<i>APOB</i>	rs576203	02p24.01	21.247.378	GA	A	LDL	~21kb down of APOB	[7]
<i>APOB</i>	rs488507	02p24.01	21.247.444	GT	D	LDL	~127kb down	[7]
<i>APOB</i>	rs506585	02p24.01	21.250.937	AG	A	LDL	~21kb down of APOB	[7]
<i>APOB</i>	rs478442	02p24.01	21.252.971	TG	A	LDL	~21kb down of APOB	[7]
<i>APOC1</i>	rs4420638	19q13.32	50.115.036	GA	A	LDL, CAD	APOC1 ~590bp up	[1, 2, 7]

<i>APOE</i>	rs429358	19q13.32	50.104.031	CT	A	CAD, LDL	missense	[3]
<i>ATXN2L; SH2B1</i>	rs8049439	16p11.02	28.745.266	CT	A	BMI	ATXN2L intron; SH2B1 ~37kb down	[8]
<i>B3GALT4</i>	rs12695382	06q21.32	120.431.111	AG	D.A.	LDL	intron	[1]
<i>B3GALT4, RXRB, COL11A2</i>	rs2254287	06q21.32	33.252.176	CG	A	LDL	SLC39A7 ~24kb down	[1]
<i>BAZ1B; MLXIPL</i>	rs714052	07q11.23	72.503.055	AG	A	TG	BAZ1B intron; MLXIPL ~142kb down	[2]
<i>BBS4</i>	rs7178130	15q24.01	70.765.505	GA	A	Bardet-Biedl Syndrome (209900), OB	before 5'	[9]
<i>BCAM</i>	rs10402271	19q13.32	50.021.304	GT	A	LDL, CAD	BCAM ~4kb up	[1, 7]
<i>BCAM</i>	rs4605275	19q13.32	50.030.583	CT	A	LDL	BCAM ~13kb up	[7]
<i>BCDIN3D</i>	rs7138803	12q13.13	48.533.985	GA	D	BMI	FAIM2 ~13kb; BCDIN3D ~10kb	[8]
<i>BCL11A</i>	rs10490072	02q16.01	60.523.685	TC	A	T2D	BCL11A ~11kb down	[10]
<i>BCL3</i>	rs4803750	19q13.31	49.939.717	AG	A	LDL	BCL3 ~95kb	[7]
<i>BCL7B; MLXIPL</i>	rs17145738	07q11.23	72.621.060	CT	D.A.	TG	BCL7B ~11kb up; MLXIPL ~56kb down	[1]
<i>BDNF; BDNFOS</i>	rs4074134	11p14.01	27,604,111	AG	D	BMI	intron BDNFOS; BDNF ~6kb down;	[8]
<i>BDNF; BDNFOS</i>	rs4923461	11p14.01	27,613,736	AG	A	BMI	intron BDNFOS; BDNF ~6kb down;	[8]
<i>BDNF; BDNFOS</i>	rs925946	11p14.01	27,624,028	GT	D	BMI	intron BDNFOS; BDNF ~6kb down;	[8]
<i>BDNF; BDNFOS</i>	rs10501087	11p14.01	27,626,934	TC	A	BMI	intron BDNFOS; BDNF ~6kb down;	[8]
<i>BDNF; BDNFOS</i>	rs6265	11p14.01	27,636,742	GA	A	BMI	missense in BDNF	[8]
<i>C12orf30</i>	rs17696736	12q24.13	110.971.451	AG	D	T2D	Intron	[8]
<i>CACNA1D</i>	rs4687736	03q23.01	53.720.402	CG	A	T2D	intron	[11]
<i>CACNA1D</i>	rs3796347	03q23.01	53.768.180	AG	D	T2D	intron	[11]
<i>CAMK2A</i>	rs3822607	05q33.01	149.592.236	CT	A	T2D	intron	[11]
<i>CAPN10</i>	rs2975760	02q37.03	241.180.086	CT	A	T2D	intron	[4]
<i>CCDC93</i>	rs11684454	02q14.01	118,479,788	AG	D	OB	intron	[4]
<i>CDC123, CAMK1D</i>	rs12779790	10q14.00	12.367.766	AG	D	T2D	CAMK1D ~60kb; CDC123 ~33kb	[4]
<i>CDKAL1</i>	rs10946398	06p23.03	20.769.263	CA	A	T2D	intron	[12, 13]
<i>CDKAL1</i>	rs7754840	06p23.03	20.769.479	GC	D	T2D	intron	[14, 15]
<i>CDKAL1</i>	rs9465871	06p23.03	20.825.484	TC	D	T2D	intron	[10]
<i>CDKN2B</i>	rs564398	09p21.03	22.019.797	TC	A	T2D	intron	[11]
<i>CDKN2B</i>	rs10811661	09p21.03	22.124.344	CT	D	T2D	CDKN2BAS ~12kb up	[12-16]
<i>CELSR2</i>	rs6657811	01p13.03	109.609.056	AT	A	LDL	intron	[7]
<i>CELSR2</i>	rs4970834	01p13.03	109.616.653	CT	A	LDL	intron	[7]
<i>CELSR2</i>	rs611917	01p13.03	109.617.025	CT	D	LDL	intron	[7]

<i>CELSR2</i>	rs12740374	01p13.03	109.619.363	GT	A	LDL	3'UTR	[2, 7]
<i>CELSR2</i>	rs660240	01p13.03	109.619.611	AG	D	LDL	3'UTR	[7]
<i>CELSR2</i>	rs629301	01p13.03	109.620.079	AC	A	LDL	down 3' <i>CELSR2</i>	[7]
<i>CELSR2</i>	rs646776	01p13.03	109.620.303	AG	A	LDL	down 3' <i>CELSR2</i>	[7]
<i>CELSR2</i>	rs602633	01p13.03	109.623.284	AC	D	LDL	4kb down <i>CELSR2</i> ; up of 5' <i>PSRC1</i>	[1, 7]
<i>CELSR2</i>	rs599839	01p13.03	109.623.939	GA	D	LDL	down 3' <i>CELSR2</i> ; up of 5' <i>PSRC1</i>	[1, 7]
<i>CETP</i>	rs9989419	16q13.00	55.542.890	GA	D	HDL	<i>CETP</i> ~10kb down	[1]
<i>CETP</i>	rs173539	16q13.00	55.545.795	TC	D	HDL	<i>CETP</i> ~8kb down	[2]
<i>CETP</i>	rs3764261	16q13.00	55.551.075	CA	A	HDL	<i>CETP</i> ~3kb down	[1]
<i>CETP</i>	rs1864163	16q13.00	55.554.984	GA	D	HDL	intron	[1]
<i>CHGA</i>	rs941584	14q32.12	92.461.325	AG	A	T2D	intron	[11]
<i>Chr 02 gap</i>	rs6712932	02q12.01	105.204.280	AG	D	T2D	<i>GPR45</i> ~20kb down	[17]
<i>Chr 11 gap</i>	rs9300039	11p12.00	41.872.192	CA	A	T2D	<i>API5</i> ~1Mb down	[15]
<i>Chr 12q13</i>	rs11171739	11q13.02	54.757.142	CT	A	T2D	<i>ERBB3</i> ~4kb down	[10]
<i>Chr 1p13</i>	rs6679677	01p13.02	114.105.581	CA	D	T2D	-	[10]
<i>Chr 21 gap</i>	rs200801	21q21.01	18.255.767	AG	A	T2D	mRNA's ~80kb up; <i>Chondrolectin</i> ~300kb down	[6]
<i>Chr 21 gap</i>	rs2254434	21q21.01	18.257.252	GA	D	T2D	mRNA's ~80kb up; <i>Chondrolectin</i> ~300kb down	[6]
<i>Chr 21 gap</i>	rs158081	21q21.01	18.291.122	AG	D	T2D	gene gap	[6]
<i>CILP2</i>	rs16996148	09p13.11	19.519.722	GT	A	LDL, TG	<i>CLIP2</i> ~1kb up	[1]
<i>CILP2,PBX4</i>	rs17216525	09p13.11	19.523.470	CT	A	TG	<i>CILP2</i> ~5kb up; <i>PBX5</i> ~67kb down	[2]
<i>CLEC16A</i>	rs12708716	16p13.13	11.087.624	AG	D	T2D	intron	[10]
<i>CLEC2D</i>	rs3764021	12p13.31	9.725.145	GA	D	T2D	cds synon	[10]
<i>CTLA4</i>	rs3087243	02q33.02	204.447.414	GA	D	T2D	down <1kb	[3]
<i>CYP19A1 / GLDN</i>	rs2446405	15q21.02	49.434.335	AT	A	IR	<i>GLDN</i> intron	[18]
<i>CYP3a5</i>	rs776746	07q22.01	99.108.725	AG	A	HT; salt sensitivity	intron	[3, 5]
<i>DCD</i>	rs1153188	12q13.02	53.385.513	AT	A	T2D	<i>DCD</i> ~60kb up	[4]
<i>DOCK7</i>	rs1748195	01p31.03	62.822.431	GC	D	TG	intron	[1]
<i>DOCK7</i>	rs10889353	01p31.03	62.891.034	AC	A	TG	intron	[2]
<i>DPEP2</i>	rs255052	16q22.01	66.582.746	GA	A	HDL	intron	[1]
<i>EGFR</i>	rs2075112	07p11.02	55.187.355	GA	D	T2D	intron	[11]
<i>ENPP1</i>	rs1044498	06q23.02	132.214.311	CA	A	IR	missense	[3]
<i>ETV5; DGKG</i>	rs7647305	03q27.02	187.317.234	TC	D	BMI	<i>ETV5</i> ~8kb up; <i>DGKG</i> ~30kb down;	[8]
<i>EXT2</i>	rs1113132	11p11.02	44.210.229	CG	A	T2D	intron	[16]
<i>EXT2</i>	rs11037909	11p11.02	44.212.440	CT	D	T2D	intron	[16]

<i>EXT2</i>	rs3740878	11p11.02	44.214.628	AG	A	T2D	intron	[16]
<i>FADS1-FADS2-FADS3</i>	rs174547	11q12.02	61.327.609	CT	A	HDL,TG	intron	[2]
<i>FGF2; NUDT6</i>	rs1048201	04q28.01	124.034.008	CT	D	T2D	3'UTR in FGF2; missense in NUDT6	[11]
<i>FOXA3</i>	rs11669442	19q13.32	51.066.647	TC	D	T2D	intron	[11]
<i>FTO</i>	rs6499640	16q12.02	52.327.428	AG	A	BMI	intron	[8]
<i>FTO</i>	rs9939973	16q12.02	52.358.319	GA	D	OB	intron	[19]
<i>FTO</i>	rs1421085	16q12.02	52.358.705	TC	D	BMI	intron	[20]
<i>FTO</i>	rs1121980	16q12.02	52.366.998	TC	A	BMI, OB, T2D	intron	[19, 21]
<i>FTO</i>	rs8050136	16q12.02	52.374.026	AC	A	BMI	intron	[8]
<i>FTO</i>	rs8050136	16q12.02	52.374.026	AC	A	T2D, BMI	intron	[12, 13, 15]
<i>FTO</i>	rs3751812	16q12.02	52.376.211	GT	D	BMI	intron	[8]
<i>FTO</i>	rs9939609	16q12.02	52.377.778	AT	A	BMI	intron	[22]
<i>FTO</i>	rs9939609	16q12.02	52.378.278	AT	A	T2D, BMI	intron	[10]
<i>FTO</i>	rs7190492	16q12.02	52.386.503	GA	A	BMI	intron	[8]
<i>FTO</i>	rs9930506	16q12.02	52.388.216	GA	A	BMI, WtH	intron	[23]
<i>FTO</i>	rs8044769	16q12.02	52.396.886	CT	A	BMI	intron	[8]
<i>G6PC2</i>	rs560887	02q24.03	169.471.644	GA	D	FGL	intron	[10]
<i>GAD2</i>	rs2236418	10p12.01	26.545.752	GA	A	OB	5'UTR	[3]
<i>GALNT2</i>	rs2144300	01q42.13	228.361.789	CT	A	HDL, TG	intron	[1]
<i>GALNT2</i>	rs4846914	01q42.13	228.362.564	GA	A	HDL	intron	[1, 2]
<i>GCA</i>	rs3788964	02q24.02	162.915.976	AG	D	T2D	intron	[24]
<i>GCK</i>	rs4607517	07p13.00	44.202.443	GA	D	FGL	GCK ~7kb up;	[24]
<i>GCKR</i>	rs1260326	02p23.03	27.584.694	CT	D	TG	missense	[1, 2]
<i>GCKR</i>	rs780094	02p23.03	27.594.991	CT	D	TG	intron	[1]
<i>GNPDA2</i>	rs10938397	04p13.00	44.877.534	AG	D	BMI, OB, T2D	GNPDA2 ~454kb up	[21]
<i>GRIN3A</i>	rs1323432	09q31.01	103.403.008	AG	D	HDL	intron	[1]
<i>HHEX</i>	rs1111875	10q23.33	94.453.112	TC	D	T2D	HHEX ~8kb up	[13-16]
<i>HHEX</i>	rs5015480	10q23.33	94.455.789	CT	A	T2D	HHEX ~10kb up	[12, 13]
<i>HHEX</i>	rs7923837	10q23.33	94.472.147	GA	A	T2D	HHEX ~27kb up	[16]
<i>HLA-DQA1</i>	rs9272346	06p21.32	32.712.600	AG	D	T2D	HLA-DQA1 ~500bp down	[10]
<i>HLA-DRB1</i>	rs9270986	06p21.32	32.682.288	CA	D	T2D	HLA-DRB1 ~28kb up	[10]
<i>HMGCR</i>	rs3846663	05q13.03	74.691.732	TC	A	LDL	intron	[2]
<i>HNFI1A</i>	rs2650000	12q24.31	119.873.595	CA	D	LDL	HNFI1A ~28kb down	[2]
<i>HNFI1B</i>	rs757210	17q12.00	33.170.878	AG	A	T2D	intron	[12]
<i>HNFI1B</i>	rs7501939	17q12.00	33.175.519	CT	D	T2D	intron	[11]
<i>HNFI4A</i>	rs1800961	20q13.12	42.476.028	CT	D	HDL	missense	[2]
<i>IFIH1</i>	rs1990760	02q24.02	162.832.547	CT	A	T2D	missense	[10]

<i>IGF2BP2</i>	rs4402960	03q27.02	186.994.631	GT	D	T2D	intron	[12-16]
<i>IGF2BP2</i>	rs1470579	03q27.02	187.012.024	CA	A	T2D	intron	[14]
<i>IL2RA</i>	rs706778	10p15.01	6.139.205	AG	A	T2D	intron	[10]
<i>IL2RA</i>	rs2104286	10p15.01	6.139.301	AG	D		intron	[10]
<i>INS</i>	rs689	11p15.05	2.139.050	TA	A	T2D	intron	[10]
<i>INSIG2</i>	rs7566605	02q14.01	118.552.745	GC	D	OB	INSIG2 ~10kb down	[17]
<i>JAZF1</i>	rs864745	07p15.01	28.147.331	TC	A	T2D	intron	[4]
<i>KCNJ11</i>	rs5219	11p15.01	17.366.398	TA (ACGT)	A	T2D	nonsense	[10, 12, 14, 15]
<i>KCNJ12</i>	rs5215	11p15.01	17.365.456	TC	D		missense	[10, 13]
<i>KCTD10; MYO1H</i>	rs2338104	12q24.11	108.379.801	GC	A	HDL	KCTD10 intron; MYO1H ~9kb up	[1, 2]
<i>KCTD15</i>	rs29941	19q13.11	39.001.622	CT	A	BMI	KCTD15 ~6kb up	[8]
<i>KCTD15</i>	rs11084753	19q13.11	39.014.227	GA	A	BMI, OB, T2D	KCTD15 ~17kb up	[21]
<i>KIAA1109</i>	rs6534347	04q27.00	123.418.135	GA	D	T2D	intron	[10]
<i>LDLR</i>	rs11668477	19p13.02	11.056.280	AG	A	LDL	LDLR ~4kb down	[7]
<i>LDLR</i>	rs6511720	19p13.02	11.063.556	GT	A	LDL; CAD	intron	[1, 2]
<i>LDLR</i>	rs2228671	19p13.02	11.072.162	TC	D	LDL	cds synon	[7]
<i>LIPC</i>	rs4775041	15q22.01	56.462.237	GC	A;D	TG; HDL	LIPC ~45kb down	[1]
<i>LIPC</i>	rs10468017	15q22.01	56.466.054	CT	A;D	HDL	LIPC ~45kb down	[1, 2]
<i>LIPC</i>	rs261332	15q22.01	56.514.867	AG	D.A.	HDL	intron	[1]
<i>LIPG</i>	rs4939883	18q21.01	45.421.462	TC	A	HDL	LIPIG ~49kb up	[1, 2]
<i>LIPG</i>	rs2156552	18q21.01	45.435.916	AT	D	HDL	LIPIG ~63kb up	[1]
<i>LOC387761</i>	rs7480010	11p12.00	42.203.544	GA	A	T2D	API5 ~1Mb down	[16]
<i>LOC441171</i>	rs9494266	06q23.03	135.893.516	AG	A	T2D	AHI1 up ~33kb	[6]
<i>LPL</i>	rs2197089	08p21.03	19.870.903	GA	D.A.	HDL, TG	LPL ~2kb up	[1]
<i>LPL</i>	rs12678919	08p21.03	19.888.752	AG	D.A.	HDL, TG	LPL ~18kb up	[1, 2]
<i>LPL</i>	rs10503669	08p21.03	19.892.220	CA	A	HDL, TG	LPL ~23kb up	[1]
<i>LPL</i>	rs6993414	08p21.03	19.947.448	AG	A	TG	LPL ~79kb up	[1]
<i>LPL</i>	rs6586891	08p21.03	19.959.128	AC	D	HDL, TG	LPL ~90kb up	[1]
<i>MAF</i>	rs1424233	16q23.02	78.240.502	AG	A	BMI	MAF ~48kb up	[20]
<i>MAFB</i>	rs6102059	20q12.00	38.662.448	CT	A	LDL	MAFB ~86kb down	[2]
<i>MC4R</i>	rs17782313	18q21.32	56.002.327	TC	D	BMI	MC4R ~187kb down	[20]
<i>MC4R</i>	rs12970134	18q21.32	56.035.980	GA	D	BMI, T2D	MC4R ~53kb down	[8]
<i>MTCH2</i>	rs4752856	11p11.02	47.604.868	GA	D	BMI, OB, T2D	intron	[21]
<i>MTCH2</i>	rs10838738	11p11.02	47.619.875	AG	D	BMI	intron	[1]
<i>MTMR9</i>	rs2293855	08p23.01	11.215.070	GA	A	OB	intron	[25]
<i>MTNR1B</i>	rs1387153	11q21.00	92.313.726	CT	D	FGL	MTNR1B ~29kb down	[26]
<i>MTNR1B</i>	rs10830963	11q21.00	92.348.608	CG	D	FGL, Early insulin response to glucose	intron	[24, 27]

<i>MYO10</i>	rs31313	05p15.01	16.744.004	AG	A	T2D	intron	[11]
<i>MYO10</i>	rs173738	05p15.01	16.779.130	GA	D	T2D	intron	[11]
<i>MYO10</i>	rs253336	05p15.01	16.893.891	CA	D	T2D	intron	[11]
<i>NCAN</i>	rs2228603	09p13.11	19.191.174	CT	A	LDL	missense	[1]
<i>NEGR1</i>	rs3101336	01p31.01	72.524.023	AG	D	BMI	NERG1 ~3kb up	[8]
<i>NEGR1</i>	rs2568958	01p31.01	72.537.954	GA	D	BMI	NERG1 ~17kb up	[8]
<i>NEGR1</i>	rs2815752	01p31.01	72.585.278	CT	D	BMI, OB, T2D	NERG1 ~64kb up	[21]
<i>NFATC1</i>	rs643705	19q23.00	75.262.909	CG	?	T2D	intron	[11]
<i>NFATC1</i>	rs3826567	19q23.00	75.300.716	CT	D	T2D	intron	[11]
<i>NFKB1</i>	rs230498	04q24.00	103.708.889	GA	A	T2D	intron	[11]
<i>NFKB1</i>	rs230539	04q24.00	103.714.820	AG	A	T2D	intron	[11]
<i>NFKB1</i>	rs11722146	04q24.00	103.743.917	AG	A	T2D	intron	[11]
<i>NFKB1</i>	rs1609798	04q24.00	103.756.738	CT	A	T2D	intron	[11]
<i>NLRC5</i>	rs1566439	16q13.00	55.582.413	TC	A	HDL	intron	[11]
<i>NOTCH2</i>	rs10923931	01p12.00	120.319.732	GT	D	T2D	intron	[11]
<i>NPC1</i>	rs1805081	18q11.02	19.394.680	AG	A	BMI	missense	[20]
<i>NRXN3</i>	rs10146997	14q31.01	79.015.165	GA	A	BMI, WtH	intron	[28]
<i>NUTF2</i>	rs2271293	16q22.01	66.459.821	GA	A	HDL	intron	[2]
<i>PAX6</i>	rs628224	11p13.00	31.776.000	GA	A	T2D	intron	[11]
<i>PBX1</i>	rs7535186	01q23.03	162.834.520	GA	D	T2D	intron	[11]
<i>PCSK1</i>	rs6235	05q15.00	95.754.904	GC	D	BMI, OB, T2D	missense	[3, 9, 29]
<i>PCSK1</i>	rs6232	05q15.00	95.777.791	AG	D	BMI, OB, T2D	missense	[9, 29]
<i>PCSK9</i>	rs11206510	01p32.03	55.268.877	CT	D	LDL, CAD	PCSK9 ~9kb down	[1, 2]
<i>PFPK</i>	rs6602024	10p15.02	3.145.487	GA	D	BMI	intron	[23]
<i>PLTP</i>	rs7679	20q13.12	44.010.159	TC	D	HDL, TG	3' UTR	[2]
<i>PPARG</i>	rs1801282	03p25.02	12.368.375	CG	A	T2D	intron / nonsense	[11]
<i>PRL</i>	rs4712652	06p22.03	22.186.844	AG	A	BMI	PRL ~208kb up	[20]
<i>PSRC1</i>	rs599839	01p13.03	109.623.939	GA	D	LDL, CAD	up of 5' PSRC1	[1, 7]
<i>PTER</i>	rs10508503	10p13.00	16.340.207	CT	A	BMI	PTER ~179kb down	[20]
<i>PTPN22</i>	rs2476601	01p13.02	114.179.341	GA	D	T2D	missense	[10]
<i>PTPN23</i>	rs6679677	01p13.02	114.105.581	CA	D	T2D	RSBN1 ~45kb down	[10]
<i>RAB11B</i>	rs2967605	19p13.02	8.375.988	CT	D	HDL	RAB11B ~17kb up	[2]
<i>RBKS</i>	rs11127129	02p23.02	27.930.462	CG	A	TG	intron	[1]
<i>SEC16B</i>	rs10913469	01q25.02	176.180.392	CT	A	BMI	intron	[8]
<i>SF4; NCAN; TM6SF2</i>	rs10401969	09p13.11	19.268.968	TC	A	TG	SF4 intron; NCAN ~45kb up; TM6F2 ~24kb up	[1, 2]
<i>SH2B1</i>	rs4788102	16p11.02	28.781.149	GA	D	BMI	SH2B1 ~1,4kb down	[8]

<i>SH2B1</i>	rs7498665	16p11.02	28.790.992	GA	A	BMI, OB, T2D	missense	[21]
<i>SLC12A3</i>	rs12596776	16q13.00	55.477.099	CG	A	HDL	intron	[1]
<i>SLC2A2</i>	rs5400	03q26.02	172.215.244	TC	A	T2D	missense	[3]
<i>SLC30A8</i>	rs13266634	08q24.11	118.254.214	CT	A	T2D	missense	[12-16]
<i>STK32C</i>	rs7910485	10q26.03	133.899.573	GA	D	T2D	intron	[6]
<i>SYN2, PPARG</i>	rs17036101	03p25.02	12.253.095	AG	D	T2D	SYN2 ~45kb up; PPARG ~51kb down	[3, 10, 12, 14, 15]
<i>TCF7L2</i>	rs17747324	10q25.02	114.742.743	TC	D	T2D	intron	[15]
<i>TCF7L2</i>	rs7901695	10q25.02	114.744.328	GA	A	T2D	intron LD to 7903146	[6, 10, 12, 15]
<i>TCF7L2</i>	rs4506565	10q25.02	114.746.281	TA	A	T2D	intron	[10]
<i>TCF7L2</i>	rs7903146	10q25.02	114.748.589	TC	A	T2D	intron	[10, 14-16, 30]
<i>TCF7L2</i>	rs12255372	10q25.02	114.799.142	CA	D	T2D	intron	[6, 30]
<i>THADA</i>	rs7578597	02p21.00	43.586.577	TC	A	T2D	missense	[4]
<i>TIMD4-HAVCR1</i>	rs1501908	05q33.03	156.330.997	CG	D	LDL	TIMD4 ~8kb up	[2]
<i>TMEM18</i>	rs2867125	02p24.03	613.077	GA	A	BMI	TMEM18 ~45kb down	[8]
<i>TMEM18</i>	rs6548238	02p24.03	625.155	CT	D	BMI, OB, T2D	TMEM18 ~33kb down	[21]
<i>TMEM18</i>	rs4854344	02p24.03	628.394	GT	D	BMI	TMEM18 ~30kb down	[8]
<i>TMEM18</i>	rs7561317	02p24.03	635.203	AG	D	BMI	TMEM18 ~23kb down	[6]
<i>TOMM40</i>	rs2075650	19q13.31	50.087.709	GA	A	LDL	intron	[7]
<i>TRIB1</i>	rs17321515	08q24.13	126.555.841	AG	A	TG	TRIB1 ~36kb upstream	[1]
<i>TRIB1</i>	rs2954029	08q24.13	126.560.404	AT	A	TG	TRIB1 ~41kb upstream	[1, 2]
<i>TSPAN8</i>	rs7961581	12q21.01	69.949.619	TC	D	T2D	TSPAN8 ~112kb up	[4]
<i>TTC39B</i>	rs471364	09p22.03	15.279.828	TC	D	HDL	intron	[2]
<i>TTC7B</i>	rs942740	14q32.01	90.228.872	GA	D	T2D	intron	[6]
<i>TTC7B</i>	rs1749718	14q32.01	90.253.330	AG	A	T2D	intron	[6]
<i>USF1</i>	rs3737787	01q23.03	159.276.397	CT	A	Familial combined hyperlipidemia (144250)	3'UTR	[3]
<i>VEGFA</i>	rs9472138	06p21.01	43.919.990	CT	D	T2D	VEGFA ~58kb up	[4]
<i>WFS1</i>	rs752854	04p16.01	6.333.112	AG	A	T2D	intron	[11]
<i>WFS1</i>	rs10010131	04p16.01	6.344.066	GA	D	T2D	intron	[12]
<i>WFS1</i>	rs10010131	04p16.01	6.344.066	GA	A	T2D	intron	[11]
<i>WFS1</i>	rs6446482	04p16.01	6.346.844	CG	?	T2D	intron	[11]
<i>WFS1</i>	rs734312	04p16.01	6.354.505	GA	D	T2D	missense	[11]
<i>XKR6-AMACIL2</i>	rs7819412	08p23.01	11.082.821	AG	A	TG	intron	[2]

^a Next to the keywords that were used to collect and select the candidate SNPs from the literature, the table also includes all reported associations with related quantitative traits.

Chr chromosome; A ancestral allele; D derived allele; BMI body mass index (OMIM ID: 606641); T2D type 2 diabetes (OMIM ID: 125853); OB obesity (OMIM ID: 601665); HT hypertension (OMIM ID: 145500); TG triglycerides; LDL low-density lipoprotein; HDL high-density lipoprotein; CAD coronary artery disease (OMIM ID:

608320); IR insulin resistance ; FGL fasting glucose level ; WtH waist to hip ratio ; UP upstream ; DOWN downstream; Chromosomal band according to UCSC Genome Browser (Feb. 2009 (GRCh37/hg19) Assembly) [31-33], Chromosomal position according to ref_assembly at ncbi dbSNP (<http://www.ncbi.nlm.nih.gov>).

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