

SUPPLEMENTAL MATERIAL

Table S1. Correlation coefficients (r_s) for pre-menopausal women - Correlations between variables relating to VLDL₁ metabolism

	Total body fat (kg)	Android/tot fat (kg)	Gynoid/tot fat (kg)	Visceral fat (cm ²)	Subcut fat (cm ²)	HOMA-IR	Plasma NEFA* (μmol/L)	Plasma 3OHB* (μmol/L)	VLDL ₁ -TG prod/d	VLDL ₁ -TG SCD iso index	VLDL ₁ -TG SCD16	VLDL ₁ -TG SCD18	VLDL ₁ -TG DNL (%)	VLDL ₁ -TG 18:2n-6 (%)	VLDL ₁ -TG prod/apo B prod
Liver fat (%)	0.57 P=0.001	0.63 P<0.001	-0.39 P=0.034	0.71 P<0.001	0.47 P=0.009	0.63 P<0.001	-0.07 P=0.702	-0.42 P=0.022	0.40 P=0.045	0.41 P=0.025	-0.05 P=0.803	-0.33 P=0.078	0.47 P=0.009	-0.19 P=0.323	-0.29 P=0.150
Total body fat (kg)		0.68 P<0.001	-0.63 P<0.001	0.80 P<0.001	0.90 P<0.001	0.36 P=0.052	-0.00 P=0.982	-0.33 P=0.077	0.61 P=0.001	0.39 P=0.039	0.17 P=0.370	-0.13 P=0.480	0.49 P=0.006	-0.35 P=0.055	-0.07 P=0.739
Android/tot fat (kg)			-0.74 P<0.001	0.78 P<0.001	0.63 P<0.001	0.53 P=0.003	-0.10 P=0.596	-0.37 P=0.046	0.53 P=0.005	0.35 P=0.057	0.09 P=0.629	-0.20 P=0.300	0.32 P=0.085	-0.07 P=0.699	-0.07 P=0.719
Gynoid/tot fat (kg)				-0.63 P<0.001	-0.45 P=0.012	-0.50 P=0.005	0.06 P=0.743	0.43 P=0.019	-0.72 P<0.001	-0.41 P=0.024	0.02 P=0.911	0.11 P=0.556	-0.47 P=0.008	0.09 P=0.626	-0.34 P=0.088
Visceral fat (cm ²)					0.65 P<0.001	0.66 P<0.001	-0.17 P=0.364	-0.52 P=0.004	0.56 P=0.003	0.44 P=0.015	0.08 P=0.670	-0.15 P=0.430	0.45 P=0.013	-0.37 P=0.047	-0.05 P=0.797
Subcut fat (cm ²)						0.17 P=0.370	-0.002 P=0.993	-0.19 P=0.322	0.44 P=0.024	0.27 P=0.144	0.24 P=0.197	-0.13 P=0.511	0.35 P=0.057	-0.22 P=0.250	-0.21 P=0.296
HOMA-IR							-0.25 P=0.176	-0.60 P<0.001	0.19 P=0.344	0.54 P=0.002	-0.15 P=0.430	-0.34 P=0.064	0.46 P=0.011	-0.13 P=0.481	0.00 P=0.988
Plasma NEFA* (μmol/L)								0.58 P=0.001	-0.06 P=0.777	-0.42 P=0.020	0.01 P=0.940	-0.22 P=0.250	-0.10 P=0.585	-0.10 P=0.591	0.16 P=0.430

Plasma 3OHB* (μmol/L)										-0.37 P=0.060	-0.91 P<0.001	-0.17 P=0.385	0.11 P=0.564	-0.49 P=0.006	0.27 P=0.153	0.04 P=0.859	
VLDL ₁ -TG prod/d											0.48 P=0.012	0.16 P=0.429	0.07 P=0.739	0.55 P=0.003	-0.21 P=0.314	0.22 P=0.290	
VLDL ₁ -TG SCD iso index												0.25 P=0.181	-0.21 P=0.269	0.47 P=0.009	-0.44 P=0.014	-0.02 P=0.917	
VLDL ₁ -TG SCD16													0.39 P=0.034	-0.16 P=0.750	-0.32 P=0.087	-0.15 P=0.456	
VLDL ₁ -TG SCD18														-0.12 P=0.514	0.12 P=0.520	0.21 P=0.298	
VLDL ₁ -TG DNL (%)															-0.06 P=0.736	0.15 P=0.470	
VLDL ₁ -TG 18:2 n-6 (%)																	-0.18 P=0.371

*AUC

Abbreviations: tot, total; Subcut, subcutaneous; HOMA_IR, homeostatic model assessment of insulin resistance; NEFA, non-esterified fatty acids; 3OHB, 3-hydroxybutyrate; VLDL, very low-density lipoprotein; TG, triglyceride, SCD, Stearoyl-CoA desaturase 1; prod, production; d, day; iso, isotopic; SCD16, ratio of 16:1n-7 / 16:0; SCD18, ratio 18:1n-9/18:0; DNL, *de novo* lipogenesis; AUC, area under the curve

Table S2. Correlation coefficients (r_s) for pre-menopausal women - Correlations between variables relating to VLDL₂ metabolism.

	Total body fat (kg)	Android/tot fat (kg)	Gynoid/tot fat (kg)	Visceral fat (cm ²)	Subcut fat (cm ²)	HOMA-IR	Plasma NEFA* (μmol/L)	Plasma 3OHB* (μmol/L)	VLDL ₂ -TG prod/d	VLDL ₂ -TG SCD iso index	VLDL ₂ -TG SCD16	VLDL ₂ -TG SCD18	VLDL ₂ -TG DNL (%)	VLDL ₂ -TG 18:2n-6 (%)	VLDL ₂ -TG prod/apo B prod
Liver fat (%)	0.57 P=0.001	0.63 P<0.001	-0.39 P=0.034	0.71 P<0.001	0.47 P=0.009	0.63 P<0.001	-0.07 P=0.702	-0.42 P=0.022	0.21 P=0.306	0.38 P=0.040	0.01 P=0.952	-0.37 P=0.042	0.42 P=0.021	-0.19 P=0.323	-0.29 P=0.150
Total body fat (kg)		0.68 P<0.001	-0.63 P<0.001	0.80 P<0.001	0.90 P<0.001	0.36 P=0.052	-0.00 P=0.982	-0.33 P=0.077	0.51 P=0.007	0.41 P=0.023	0.21 P=0.257	-0.24 P=0.202	0.41 P=0.023	-0.25 P=0.177	0.23 P=0.255
Android/tot fat (kg)			-0.74 P<0.001	0.78 P<0.001	0.63 P<0.001	0.53 P=0.003	-0.10 P=0.596	-0.37 P=0.046	0.29 P=0.145	0.36 P=0.052	0.12 P=0.516	-0.31 P=0.092	0.22 P=0.240	-0.05 P=0.791	0.11 P=0.580
Gynoid/tot fat (kg)				-0.63 P<0.001	-0.45 P=0.012	-0.50 P=0.005	0.06 P=0.743	0.43 P=0.019	-0.27 P=0.184	-0.43 P=0.018	0.00 P=0.992	0.21 P=0.259	-0.39 P=0.031	0.10 P=0.609	-0.19 P=0.355
Visceral fat (cm ²)					0.65 P<0.001	0.66 P<0.001	-0.17 P=0.364	-0.52 P=0.004	0.40 P=0.046	0.45 P=0.013	0.13 P=0.484	-0.25 P=0.188	0.30 P=0.105	-0.33 P=0.079	-0.07 P=0.721
Subcut fat (cm ²)						0.17 P=0.370	-0.002 P=0.993	-0.19 P=0.322	0.40 P=0.044	0.29 P=0.124	0.24 P=0.212	-0.22 P=0.240	0.29 P=0.116	-0.09 P=0.626	0.17 P=0.407
HOMA-IR							-0.25 P=0.176	-0.60 P<0.001	0.18 P=0.386	0.51 P=0.004	-0.09 P=0.624	-0.34 P=0.067	0.38 P=0.036	-0.19 P=0.307	0.01 P=0.954
Plasma NEFA* (μmol/L)								0.58 P=0.001	0.25 P=0.217	-0.39 P=0.034	-0.02 P=0.928	-0.30 P=0.107	0.04 P=0.847	-0.02 P=0.917	0.19 P=0.353

Plasma 3OHB* (μmol/L)										-0.11 P=0.589	-0.90 P<0.001	-0.17 P=0.365	0.10 P=0.618	-0.50 P=0.005	0.32 P=0.084	-0.17 P=0.405
VLDL ₂ -TG prod/d											0.26 P=0.192	0.31 P=0.129	-0.13 P=0.519	0.16 P=0.422	-0.11 P=0.610	0.72 P<0.001
VLDL ₂ -TG SCD iso index												0.22 P=0.238	-0.23 P=0.227	0.56 P=0.001	-0.45 P=0.014	0.28 P=0.169
VLDL ₂ -TG SCD16													0.35 P=0.061	-0.12 P=0.537	-0.33 P=0.077	0.22 P=0.276
VLDL ₂ -TG SCD18														-0.35 P=0.060	0.15 P=0.439	0.14 P=0.502
VLDL ₂ -TG DNL (%)															-0.30 P=0.110	0.27 P=0.178
VLDL ₂ -TG 18:2 n-6 (%)																0.06 P=0.764

*AUC

Abbreviations: tot, total; Subcut, subcutaneous; HOMA_IR, homeostatic model assessment of insulin resistance; NEFA, non-esterified fatty acids; 3OHB, 3-hydroxybutyrate; VLDL, very low-density lipoprotein; TG, triglyceride, SCD, Stearoyl-CoA desaturase 1; prod, production; d, day; iso, isotopic; SCD16, ratio of 16:1n-7 / 16:0; SCD18, ratio 18:1n-9/18:0; DNL, *de novo* lipogenesis; AUC, area under the curve

Table S3. Correlation coefficients (r_s) for post-menopausal women - Correlations between variables relating to VLDL₁ metabolism

	Total body fat (kg)	Android/tot fat (kg)	Gynoid/tot fat (kg)	Visceral fat (cm ²)	Subcut fat (cm ²)	HOMA-IR	Plasma NEFA* (μmol/L)	Plasma 3OHB* (μmol/L)	VLDL ₁ -TG prod/d	VLDL ₁ -TG SCD iso index	VLDL ₁ -TG SCD16	VLDL ₁ -TG SCD18	VLDL ₁ -TG DNL (%)	VLDL ₁ -TG 18:2n-6 (%)	VLDL ₁ -TG prod/apo B prod
Liver fat (%)	0.28 P=0.150	0.26 P=0.184	-0.42 P=0.028	0.61 P<0.001	0.26 P=0.192	0.23 P=0.232	0.00 P=0.994	0.09 P=0.647	0.05 P=0.797	-0.11 P=0.595	-0.42 P=0.023	-0.26 P=0.173	0.04 P=0.838	0.11 P=0.578	0.26 P=0.200
Total body fat (kg)		0.78 P<0.001	-0.57 P=0.002	0.73 P<0.001	0.86 P<0.001	0.29 P=0.133	-0.09 P=0.648	0.19 P=0.326	0.34 P=0.093	-0.01 P=0.949	-0.13 P=0.512	0.22 P=0.279	0.01 P=0.967	0.32 P=0.106	0.35 P=0.077
Android/tot fat (kg)			-0.76 P<0.001	0.72 P<0.001	0.69 P<0.001	0.35 P=0.064	-0.35 P=0.072	-0.14 P=0.475	0.57 P=0.003	0.23 P=0.246	-0.21 P=0.287	-0.05 P=0.788	0.19 P=0.342	0.29 P=0.143	0.25 P=0.225
Gynoid/tot fat (kg)				-0.80 P<0.001	-0.51 P=0.005	-0.24 P=0.219	0.13 P=0.523	-0.05 P=0.818	-0.41 P=0.039	0.02 P=0.906	0.22 P=0.262	-0.05 P=0.788	-0.27 P=0.160	-0.27 P=0.172	0.02 P=0.922
Visceral fat (cm ²)					0.58 P=0.001	0.43 P=0.018	-0.13 P=0.510	0.12 P=0.538	0.29 P=0.141	-0.02 P=0.934	-0.29 P=0.133	0.07 P=0.739	0.13 P=0.493	0.28 P=0.145	0.11 P=0.577
Subcut fat (cm ²)						0.18 P=0.342	0.09 P=0.640	0.22 P=0.262	0.22 P=0.282	0.07 P=0.734	0.06 P=0.772	0.22 P=0.260	-0.02 P=0.915	0.248 P=0.195	0.21 P=0.286
HOMA-IR							-0.08 P=0.688	0.30 P=0.111	0.00 P=0.988	-0.19 P=0.340	-0.28 P=0.136	-0.08 P=0.675	-0.10 P=0.611	-0.10 P=0.602	0.39 P=0.043
Plasma NEFA* (μmol/L)								0.61 P<0.001	-0.46 P=0.016	-0.52 P=0.005	0.28 P=0.147	0.34 P=0.078	-0.39 P=0.035	-0.14 P=0.482	-0.11 P=0.585

Plasma 3OHB* (μmol/L)										-0.39 P=0.045	-0.74 P<0.001	-0.06 P=0.781	0.28 P=0.149	-0.33 P=0.081	0.17 P=0.376	0.00 P=0.993
VLDL ₁ -TG prod/d											0.27 P=0.191	-0.21 P=0.302	-0.15 P=0.464	0.07 P=0.712	-0.5 P=0.792	0.34 P=0.084
VLDL ₁ -TG SCD iso index											0.10 P=0.622	-0.35 P=0.066	0.59 P=0.001	0.01 P=0.958	0.02 P=0.922	
VLDL ₁ -TG SCD16												0.60 P=0.001	-0.11 P=0.563	-0.19 P=0.317	-0.51 P=0.008	
VLDL ₁ -TG SCD18													-0.33 P=0.082	-0.06 P=0.745	-0.29 P=0.154	
VLDL ₁ -TG DNL (%)														0.33 P=0.081	-0.06 P=0.772	
VLDL ₁ -TG 18:2 n-6 (%)																0.10 P=0.629

*AUC

Abbreviations: tot, total; Subcut, subcutaneous; HOMA_IR, homeostatic model assessment of insulin resistance; NEFA, non-esterified fatty acids; 3OHB, 3-hydroxybutyrate; VLDL, very low-density lipoprotein; TG, triglyceride, SCD, Stearoyl-CoA desaturase 1; prod, production; d, day; iso, isotopic; SCD16, ratio of 16:1n-7 / 16:0; SCD18, ratio 18:1n-9/18:0; DNL, *de novo* lipogenesis; AUC, area under the curve

Table S4. Correlation coefficients (r_s) for post-menopausal women - Correlations between variables relating to VLDL₂ metabolism

	Total body fat (kg)	Android/tot fat (kg)	Gynoid/tot fat (kg)	Visceral fat (cm ²)	Subcut fat (cm ²)	HOMA-IR	Plasma NEFA* (μmol/L)	Plasma 3OHB* (μmol/L)	VLDL ₂ -TG prod/d	VLDL ₂ -TG SCD iso index	VLDL ₂ -TG SCD16	VLDL ₂ -TG SCD18	VLDL ₂ -TG DNL (%)	VLDL ₂ -TG 18:2n-6 (%)	VLDL ₂ -TG prod/apo B prod
Liver fat (%)	0.28 P=0.150	0.26 P=184	-0.42 P=0.028	0.61 P<0.001	0.26 P=0.192	0.23 P=0.232	0.00 P=0.994	0.09 P=0.647	-0.15 P=0.470	-0.05 P=0.797	-0.46 P=0.013	-0.44 P=0.016	0.11 P=0.564	0.15 P=0.450	0.11 P=0.594
Total body fat (kg)		0.78 P<0.001	-0.57 P=0.002	0.73 P<0.001	0.86 P<0.001	0.29 P=0.133	-0.09 P=0.648	0.19 P=0.326	0.18 P=0.380	-0.03 P=0.875	-0.12 P=0.554	-0.04 P=0.842	0.13 P=0.518	0.27 P=0.171	0.30 P=0.133
Android/tot fat (kg)			-0.76 P<0.001	0.72 P<0.001	0.69 P<0.001	0.35 P=0.064	-0.35 P=0.072	-0.14 P=0.475	0.20 P=0.341	0.20 P=0.329	-0.23 P=0.244	-0.13 P=0.506	0.16 P=0.423	0.22 P=0.275	0.31 P=0.123
Gynoid/tot fat (kg)				-0.80 P<0.001	-0.51 P=0.005	-0.24 P=0.219	0.13 P=0.523	-0.05 P=0.818	0.01 P=0.948	0.01 P=0.957	0.21 P=0.303	0.12 P=0.556	-0.28 P=0.149	-0.32 P=0.109	-0.17 P=0.410
Visceral fat (cm ²)					0.58 P=0.001	0.43 P=0.018	-0.13 P=0.510	0.12 P=0.538	0.04 P=0.849	0.01 P=0.963	-0.25 P=0.190	-0.15 P=0.437	0.18 P=0.355	0.25 P=0.191	0.23 P=0.247
Subcut fat (cm ²)						0.18 P=0.342	0.09 P=0.640	0.22 P=0.262	0.12 P=0.569	0.08 P=0.684	0.06 P=0.741	0.03 P=0.879	0.14 P=0.451	0.24 P=0.214	0.17 P=0.399
HOMA-IR							-0.08 P=0.688	0.30 P=0.111	0.19 P=0.341	-0.18 P=0.353	-0.30 P=0.111	-0.08 P=0.675	-0.09 P=0.644	-0.19 P=0.326	0.22 P=0.268
Plasma NEFA* (μmol/L)								0.61 P<0.001	-0.25 P=0.213	-0.57 P=0.002	0.30 P=0.115	0.29 P=0.137	-0.23 P=0.234	-0.16 P=0.426	-0.04 P=0.830
Plasma 3OHB* (μmol/L)									-0.07 P=0.735	-0.76 P<0.001	-0.02 P=0.934	0.19 P=0.344	-0.28 P=0.148	0.17 P=0.376	0.06 P=0.767

VLDL ₂ - TG prod/d										0.11 P=0.587	0.04 P=0.838	-0.21 P=0.304	-0.05 P=0.818	0.00 P=0.993	0.66 P<0.001
VLDL ₂ - TG SCD iso index											-0.02 P=0.925	-0.26 P=0.187	0.37 P=0.051	0.03 P=0.899	0.10 P=0.645
VLDL ₂ - TG SCD16												0.64 P<0.001	0.02 P=0.925	-0.26 P=0.169	-0.25 P=0.210
VLDL ₂ - TG SCD18													-0.28 P=0.137	-0.20 P=0.330	-0.55 P=0.004
VLDL ₂ - TG DNL (%)														0.20 P=0.287	0.13 P=0.536
VLDL ₂ - TG 18:2 n-6 (%)															0.15 P=0.479

*AUC

Abbreviations: tot, total; Subcut, subcutaneous; HOMA_IR, homeostatic model assessment of insulin resistance; NEFA, non-esterified fatty acids; 3OHB, 3-hydroxybutyrate; VLDL, very low-density lipoprotein; TG, triglyceride, SCD, Stearoyl-CoA desaturase 1; prod, production; d, day; iso, isotopic; SCD16, ratio of 16:1n-7 / 16:0; SCD18, ratio 18:1n-9/18:0; DNL, *de novo* lipogenesis; AUC, area under the curve

Table S5. Biochemical and metabolic variables in women according to abdominal obesity and liver fat.

	P _{Abd obesity}	P _{liver fat}
Total chol (mmol/l)	NS	NS
LDL chol (mmol/l)	<0.05	NS
HDL chol (mmol/l)	<0.001	0.08
Non-HDL chol (mmol/l)	<0.01	NS
TG (mmol/l)	<0.01	<0.05
VLDL ₁ -TG (μmol/l)	0.001	<0.05
VLDL ₂ -TG (μmol/l)	<0.01	<0.05
Plasma apoC-III (mg/l)	NS	NS
apoCIII-LpB (mg/l)	NS	NS
ApoC-III Lp nonB (mg/l)	NS	NS
Plasma apoB (g/l)	<0.05	NS
VLDL ₁ -apoB (g/l)	<0.05	<0.05
VLDL ₂ -apoB (g/l)	<0.05	0.09
Insulin (mU/l)	<0.001	P<0.01
Glucose (mmol/l)	<0.05	0.08
HOMA-IR	<0.01	P<0.01
NEFA (μmol, AUC)	NS	NS
Plasma 3OHB (μmol, AUC)	<0.05	NS
Systolic BP (mmHg)	NS	NS
Diastolic BP (mmHg)	NS	NS

Data from Table 2 re-analysed by 2-way ANOVA using menopause status and liver fat as fixed factors (women divided into high and low liver fat groups according to median liver fat). Abbreviations: Chol, cholesterol; LDL, low density-lipoprotein; HDL, high density-lipoprotein; VLDL, very low-density lipoprotein; ApoB, apolipoprotein; apoC-III LpB, apoC-III associated with lipoprotein B containing particles; BP, blood pressure; HOMA-IR, estimate of insulin resistance; P_{Abdominal obesity} P_{Liver fat} Statistical significance for effects of abdominal obesity and liver fat respectively.

Table S6. Kinetic estimates relating to NEFA, VLDL and apoC-III metabolism in women according to abdominal obesity and liver fat.

	P _{Abd obesity}	P _{Liver fat}
R _a NEFA (μmol.min ⁻¹ per kg fat mass)	0.01	P<0.01
R _d NEFA (μmol.min ⁻¹ per kg lean mass)	NS	NS
R _a NEFA (μmol.min ⁻¹)	NS	NS
VLDL ₁ -TG Prod (mg/kg lean mass)	0.001	0.06
VLDL ₂ -TG dirProd (mg/kg lean mass)	0.07	NS
VLDL ₂ -TG indirProd (mg/ kg lean mass)	NS	NS
VLDL ₁ -TG FCR (pools/day)	NS	0.06
VLDL ₂ -TG FCR (pools/day)	NS	NS
VLDL ₁ -TG FTR (pools/day)	NS	NS
VLDL ₁ -TG FDC (pools/day)	NS	NS
VLDL ₁ -apoB FDC (pools/day)	NS	NS
VLDL ₁ -apoB FTR (pools/day)	NS	NS
VLDL ₁ -apoB FCR (pools/day)	NS	NS
VLDL ₂ -apoB FCR (pools/day)	NS	NS
VLDL ₁ -apoB Prod (mg per day)	0.001	<0.05
VLDL ₂ -apoB dirProd (mg per day)	NS	NS
VLDL ₂ -apoB indirProd (mg per day)	<0.05	0.06
VLDL ₁ -TG Prod:VLDL ₁ apoB Prod [‡]	NS	NS
VLDL ₂ -TG dirProd:VLDL ₂ apoB Prod [‡]	NS	NS
ApoC-III FCR (pools/day)	NS	NS
ApoC-III PR (mg per kg/day)	NS	NS

Data from Table 3 re-analysed by 2-way ANOVA using menopause status and liver fat as fixed factors (women divided into high and low liver fat groups according to median liver fat). Abbreviations: R_a, rate of appearance; R_d, rate of disappearance; TG, triacylglycerol; ApoB, Apolipoprotein B100; lean, lean tissue; Prod, production; dirprod, direct production; indirprod, indirect production FCR, fractional clearance rate; FTR, fractional transfer rate; FDC, fractional direct clearance; [‡]mg/day; P_{Abdominal obesity} P_{Liver fat} Statistical significance for effects of abdominal obesity and liver fat respectively.

Table S7 Variables relating to fatty acid metabolism in women according to abdominal obesity and liver fat.

	P _{Abd obesity}	P _{Liver fat}
Non-systemic FA - VLDL ₁ -TG (%)	<0.05	<0.01
Non-systemic FA - VLDL ₂ -TG (%)	<0.01	0.001
Non-systemic FA contribution to VLDL ₁ -TG production (mg/day)	<0.001	0.001
Non-systemic FA contribution to VLDL ₂ -TG direct production (mg/day)	<0.001	<0.001
Systemic FA contribution to VLDL ₁ -TG production (mg/day)	<0.05	NS
Systemic FA contribution to VLDL ₂ -TG direct production (mg/day)	NS	NS
VLDL ₁ -TG isotopic desaturation index ^a	0.06	NS
VLDL ₂ -TG isotopic desaturation index ^a	<0.05	NS
VLDL ₁ -16:0 TG synthesised de novo (mg/day) ^a	0.06	0.01
VLDL ₂ -16:0 TG synthesised de novo (mg/day) ^a	<0.05	0.011
3OHB/NEFA	NS	0.09

Data from Table 4 re-analysed by 2-way ANOVA using menopause status and liver fat as fixed factors (women divided into high and low liver fat groups according to median liver fat). Abbreviations: FA, fatty acid; VLDL, very low-density lipoprotein, TG, triglyceride; 3OHB, 3-hydroxybutyrate; NEFA, non-esterified fatty acids. ; P_{Abdominal obesity} P_{Liver fat} Statistical significance for effects of abdominal obesity and liver fat respectively.