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Title: Serum metabolic profiles in overweight and obese women with and without metabolic syndrome

Year: 2014

Version:

Please cite the original version:

Wiklund, P., Pekkala, S., Autio, R., Munukka, E., Xu, L., Saltevo, J., Cheng, S., Kujala, U., Alen, M., & Cheng, S. (2014). Serum metabolic profiles in overweight and obese women with and without metabolic syndrome. *Diabetology & Metabolic Syndrome*, 6(40). <https://doi.org/10.1186/1758-5996-6-40>

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Table S2. Serum lipoprotein subclasses in study population stratified by MHO and MetS categories

	MHO n=42		MetS n=36		p-value	adj. p-value
Albumin (cu)	0.100	(0.006)	0.100	(0.008)	0.947	0.5828
XXL-VLDL-PL	0.002	(0.002)	0.007	(0.004)	<0.0001	<0.0001
XXL-VLDL-L	0.019	(0.014)	0.055	(0.035)	<0.0001	<0.0001
XXL-VLDL-P*	0.566	(0.685)	2.333	(1.788)	<0.0001	<0.0001
XXL-VLDL-TG	0.013	(0.010)	0.038	(0.024)	<0.0001	<0.0001
XL-VLDL-PL	0.009	(0.007)	0.025	(0.014)	<0.0001	<0.0001
XL-VLDL-TG	0.035	(0.023)	0.086	(0.048)	<0.0001	<0.0001
XL-VLDL-L	0.055	(0.036)	0.137	(0.075)	<0.0001	<0.0001
XL-VLDL-P*	0.006	(0.004)	0.014	(0.008)	<0.0001	<0.0001
L-VLDL-C	0.046	(0.026)	0.102	(0.053)	<0.0001	<0.0001
L-VLDL-FC	0.024	(0.013)	0.052	(0.027)	<0.0001	<0.0001
L-VLDL-PL	0.033	(0.021)	0.080	(0.045)	<0.0001	<0.0001
L-VLDL-TG	0.111	(0.069)	0.251	(0.138)	<0.0001	<0.0001
L-VLDL-CE	0.023	(0.013)	0.050	(0.026)	<0.0001	<0.0001
L-VLDL-L	0.193	(0.117)	0.440	(0.238)	<0.0001	<0.0001
L-VLDL-P*	0.031	(0.019)	0.070	(0.038)	<0.0001	<0.0001
M-VLDL-C	0.143	(0.044)	0.230	(0.080)	<0.0001	<0.0001
M-VLDL-FC	0.060	(0.021)	0.100	(0.039)	<0.0001	<0.0001
M-VLDL-PL	0.091	(0.032)	0.153	(0.060)	<0.0001	<0.0001
M-VLDL-TG	0.217	(0.095)	0.383	(0.172)	<0.0001	<0.0001
M-VLDL-CE	0.083	(0.024)	0.129	(0.042)	<0.0001	<0.0001
M-VLDL-L	0.452	(0.168)	0.768	(0.309)	<0.0001	<0.0001
M-VLDL-P*	0.123	(0.048)	0.212	(0.089)	<0.0001	<0.0001
S-VLDL-C	0.252	(0.047)	0.320	(0.064)	<0.0001	0.0018
S-VLDL-FC	0.096	(0.019)	0.123	(0.027)	<0.0001	0.0014
S-VLDL-PL	0.142	(0.027)	0.184	(0.041)	<0.0001	0.0008
S-VLDL-TG	0.223	(0.061)	0.329	(0.109)	<0.0001	0.0001
S-VLDL-L	0.616	(0.128)	0.834	(0.203)	<0.0001	0.0002
S-VLDL-P*	0.277	(0.061)	0.383	(0.102)	<0.0001	0.0001
XS-VLDL-PL	0.159	(0.030)	0.192	(0.046)	0.0003	0.0277
XS-VLDL-TG	0.118	(0.025)	0.154	(0.045)	<0.0001	0.0042
XS-VLDL-L	0.546	(0.095)	0.688	(0.162)	<0.0001	0.0010
XS-VLDL-P*	0.370	(0.068)	0.474	(0.118)	<0.0001	0.0011
IDL-FC	0.224	(0.039)	0.265	(0.054)	0.0002	0.0007
IDL-PL	0.309	(0.052)	0.378	(0.077)	<0.0001	0.0087
IDL-L	1.190	(0.194)	1.455	(0.284)	<0.0001	0.0010
IDL-P*	0.941	(0.160)	1.166	(0.243)	<0.0001	0.0005
L-LDL-C	0.963	(0.179)	1.189	(0.230)	<0.0001	0.0005

L-LDL-FC	0.267	(0.045)	0.322	(0.058)	<0.0001	0.0006
L-LDL-PL	0.343	(0.050)	0.416	(0.071)	<0.0001	0.0011
L-LDL-CE	0.697	(0.134)	0.865	(0.172)	<0.0001	0.0001
L-LDL-L	1.410	(0.251)	1.743	(0.336)	<0.0001	0.0006
L-LDL-P*	1.550	(0.273)	1.916	(0.373)	<0.0001	0.0004
M-LDL-C	0.548	(0.122)	0.705	(0.152)	<0.0001	0.0004
M-LDL-PL	0.216	(0.031)	0.262	(0.041)	<0.0001	0.0004
M-LDL-CE	0.396	(0.097)	0.513	(0.119)	<0.0001	3.1457
M-LDL-L	0.809	(0.166)	1.035	(0.214)	<0.0001	0.0011
M-LDL-P*	1.240	(0.246)	1.581	(0.325)	<0.0001	0.0002
S-LDL-C	0.334	(0.081)	0.453	(0.107)	<0.0001	0.0001
S-LDL-L	0.514	(0.114)	0.703	(0.165)	<0.0001	<0.0001
S-LDL-P	1.429	(0.289)	1.890	(0.431)	<0.0001	<0.0001
XL-HDL-C	0.234	(0.086)	0.253	(0.088)	0.3361	<0.0001
XL-HDL-FC	0.062	(0.022)	0.056	(0.019)	0.2216	0.6376
XL-HDL-PL	0.226	(0.087)	0.173	(0.064)	0.0022	0.1244
XL-HDL-TG	0.014	(0.004)	0.018	(0.006)	0.0139	0.0008
XL-HDL-CE	0.168	(0.062)	0.184	(0.063)	0.2565	0.0502
XL-HDL-L	0.476	(0.169)	0.449	(0.146)	0.4483	0.4869
XL-HDL-P*	3.872	(1.431)	3.430	(1.144)	0.1287	0.2458
L-HDL-C	0.443	(0.122)	0.328	(0.111)	<0.0001	0.0001
L-HDL-FC	0.094	(0.031)	0.062	(0.026)	<0.0001	<0.0001
L-HDL-PL	0.420	(0.105)	0.323	(0.099)	<0.0001	0.0001
L-HDL-CE	0.349	(0.092)	0.265	(0.087)	<0.0001	0.0002
L-HDL-L	0.886	(0.234)	0.673	(0.212)	<0.0001	0.0001
L-HDL-P*	11.350	(2.975)	8.703	(2.719)	<0.0001	0.0002
M-HDL-C	0.506	(0.076)	0.487	(0.092)	0.2278	0.9111
M-HDL-FC	0.095	(0.015)	0.091	(0.019)	0.2572	0.6049
M-HDL-PL	0.439	(0.056)	0.443	(0.077)	0.9776	0.6183
M-HDL-CE	0.413	(0.063)	0.396	(0.075)	0.1926	0.9039
M-HDL-L	0.975	(0.132)	0.971	(0.170)	0.7630	0.6462
M-HDL-P*	17.888	(2.379)	18.100	(3.198)	0.8970	0.4554
S-HDL-TG	0.033	(0.009)	0.044	(0.015)	<0.0001	0.0023
S-HDL-L	1.147	(0.092)	1.175	(0.117)	0.2712	0.3337
S-HDL-P*	43.46	(3.091)	44.61	(3.855)	0.1575	0.1285
VLDL-TG	0.694	(0.254)	1.193	(0.493)	<0.0001	<0.0001
IDL-TG	0.122	(0.028)	0.151	(0.044)	0.0007	0.0214
IDL-C	0.763	(0.119)	0.910	(0.160)	<0.0001	0.0009
LDL-C	1.841	(0.381)	2.353	(0.489)	<0.0001	0.0002
VLDL-D	36.193	(0.970)	37.222	(0.937)	<0.0001	<0.0001
LDL-D	23.593	(0.147)	23.494	(0.125)	0.0018	0.0059
HDL-D	9.994	(0.166)	9.874	(0.150)	0.0012	0.0020
VLDL-TG-eFR	0.599	(0.213)	1.061	(0.474)	<0.0001	<0.0001
IDL-C-eFR	0.206	(0.051)	0.329	(0.120)	<0.0001	<0.0001
LDL-C-eFR	3.050	(0.461)	3.515	(0.569)	0.0001	0.0045
HDL2-C	1.090	(0.223)	0.934	(0.216)	0.0006	0.0023

HDL3-C	0.542	(0.025)	0.568	(0.054)	0.0088	0.0134
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Mean (SD) concentrations of metabolites assayed in the present study. All metabolites are in mmol/l unless stated otherwise. P-values are for 2-tailed t-tests comparing concentrations for the MHO and MetS groups with and without adjustment for age, fat mass and waist circumference. Abbreviations: VLDL: very-low-density lipoprotein; IDL: intermediate –density lipoprotein; LDL: low-density lipoprotein; HDL: high-density lipoprotein; XXL: extremely large; XL: very large; L: large; M: medium; S: small; XS: very small; L: total protein lipids; PL: phospholipids; C: cholesterol; CE: cholesterol esters; FC: free cholesterol; TG: triglycerides; D: mean diameter; eFR=values estimated with the extended friedewald method; cu: standardized concentration units; *=nmol/l. Differences with p<0.0005 are marked in bold.