Table S5. The results from the ANOVA analysis performed on the sex stratified NMR based metabolite data to investigate the differences between low BMI and high BMI groups.

(A) Males

No.	Metabolites	p-value	Effect size (%)	Fold change (MH/ML)
1	leucine	0.0124	12.09	1.2830
2	isoleucine	0.0138	11.75	1.3021
3	valine	0.0156	11.35	1.2782
4	alanine	0.0047	15.21	1.3273
5	methionine	0.0319	9.06	1.3767
6	lysine	0.0064	14.21	1.4014
7	glycine	0.0049	15.06	1.2826
8	threonine	0.0188	10.76	1.2915
9	uracil	0.0092	13.04	1.3120
10	tyrosine	0.0166	11.17	1.3117
11	phenyalanine	0.0038	15.84	1.3601
12	xanthine	0.0307	9.18	1.4788

(B) Females

No.	Metabolites	p-value	Effect size (%)	Fold change (MH/ML)
1	glutamic acid	0.0429	7.21	1.6495
2	malic acid	0.0236	8.82	1.4523
3	fumaric acid	0.0219	9.04	1.4487