

SUPPLEMENTAL MATERIAL: Metabolomic determinants of metabolic risk in Mexican adolescents

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Supplemental Table S1 Spearman correlations among components of MetRisk z-score

	Waist circumference	Glucose	C-peptide	Triglyceride:HDL	(SBP+DBP)/2
Waist circumference	1.00				
Glucose	0.02	1.00			
C-peptide	0.60	0.17	1.00		
Triglyceride:HDL	0.39	0.02	0.40	1.00	
(SBP + DBP)/2	0.53	-0.02	0.36	0.18	1.00

SBP - systolic blood pressure; **DBP** - diastolic blood pressure; **HDL** - high-density lipoprotein

Supplemental Table S2 Sex-specific associations of metabolites with pubertal status components among 238 ELEMENT adolescents.^a

	Pre-pubertal	Pubertal	β (95% CI) Pubertal vs. Pre-pubertal	P-value
	<i>cm</i>	<i>mg/dL</i>	<i>ng/mL</i>	
Girls (n = 125)				
<i>Metabolites identified via data-driven approach</i>				
Diacylglycerol 16:/16:0	-0.05 ± 1.08	0.32 ± 0.89	0.37 (0.00, 0.75)	0.05
1,3-dielaidin	0.09 ± 0.98	0.25 ± 1.11	0.16 (-0.22, 0.53)	0.42
Myo-inositol	-0.18 ± 1.091	-0.01 ± 1.02	0.17 (-0.20, 0.54)	0.37
Urate	-0.16 ± 0.96	0.17 ± 0.94	0.33 (-0.02, 0.68)	0.06
Thymine	0.01 ± 1.04	0.24 ± 0.81	0.23 (-0.12, 0.58)	0.21
Dodecenedioic acid	-0.12 ± 0.99	-0.05 ± 1.19	0.06 (-0.32, 0.46)	0.72
N-acetylglycine	-0.07 ± 0.95	0.37 ± 0.86	0.44 (0.10, 0.78)	0.01
<i>Branched chain amino acids</i>				
Leucine	-0.02 ± 0.93	0.15 ± 0.88	0.18 (-0.16, 0.51)	0.30
Isoleucine	-0.15 ± 0.94	0.24 ± 0.87	0.39 (0.05, 0.73)	0.02
Valine	-0.03 ± 1.00	0.23 ± 0.78	0.26 (-0.08, 0.60)	0.13
Boys (n = 113)				
<i>Metabolites identified via data-driven approach</i>				
Diacylglycerol 16:/16:0	-0.16 ± 1.04	0.03 ± 0.89	0.19 (-0.17, 0.55)	0.30
Tyrosine	0.10 ± 1.06	0.12 ± 0.97	0.03 (-0.35, 0.41)	0.89
5'-methylthioadenosine	0.21 ± 0.87	-0.15 ± 1.07	-0.35 (-0.72, 0.01)	0.06
<i>Branched chain amino acids</i>				
Leucine	-0.13 ± 1.01	0.13 ± 1.15	0.26 (-0.14, 0.66)	0.21
Isoleucine	-0.03 ± 1.05	0.15 ± 1.07	0.18 (-0.21, 0.58)	0.37
Valine	-0.20 ± 0.96	0.12 ± 1.13	0.32 (-0.07, 0.71)	0.11

a Puberty was defined as Tanner stage 2-5 (vs. 1) for breast (girls), testicular (boys), and pubic hair (both) development.