

SUPPLEMENTAL MATERIAL

Table S1. Multivariable* plus BMI adjusted regression models for relations between fat depots and biomarkers of metabolic regulation. Data are shown as β coefficients per 1 standard deviation increment of fat measure. Fat depots were sex-standardized to a mean of 0 and a standard deviation of 1.

Log-Biomarker	Visceral Adipose Tissue		Liver Attenuation†	
	β (95% CI)	<i>p</i> -Value	β (95% CI)	<i>p</i> -Value
Women				
Adiponectin	-0.29 (-0.36, -0.21)	< 0.001	0.10 (0.06, 0.14)	< 0.001
Leptin	0.18 (0.10, 0.26)	< 0.001	0.003 (-0.04, 0.05)	0.9
Leptin Receptor	-0.04 (-0.10, 0.02)	0.2	-0.01 (-0.04, 0.03)	0.7
Fatty Acid Binding Protein-4	0.18 (0.13, 0.23)	< 0.001	-0.04 (-0.07, -0.01)	0.005
Fetuin-A	0.001 (-0.05, 0.06)	0.98	-0.04 (-0.07, -0.01)	0.01
Retinol Binding Protein-4	0.04 (0.01, 0.08)	0.02	-0.04 (-0.05, -0.01)	0.002
Men				
Adiponectin	-0.25 (-0.32, -0.19)	< 0.001	0.12 (0.08, 0.17)	< 0.001
Leptin	0.26 (0.20, 0.32)	< 0.001	-0.02 (-0.07, 0.02)	0.2
Leptin Receptor	-0.07 (-0.12, -0.03)	0.003	-0.02 (-0.05, 0.01)	0.3
Fatty Acid Binding Protein-4	0.16 (0.12, 0.20)	< 0.001	-0.03 (-0.06, -0.01)	0.01
Fetuin-A	0.04 (0.001, 0.08)	0.04	-0.01 (-0.04, 0.01)	0.3
Retinol Binding Protein-4	0.07 (0.04, 0.09)	< 0.001	-0.01 (-0.03, 0.01)	0.2

*Multivariable models adjusted for age, smoking status, alcohol use, physical activity index, postmenopausal status (women only), and hormone replacement therapy (women only).

†Liver attenuation is represented by the natural log-transformed liver-phantom ratio.

Abbreviations: BMI, body mass index; CI, confidence Interval.

Table S2. Multivariable* regression models for relations between natural log-transformed alanine aminotransferase and aspartate aminotransferases with biomarkers of metabolic regulation. Data are shown as β coefficients per 1 standard deviation increment of each natural log-transformed aminotransferase.

Log-Biomarker	Alanine Aminotransferase				Aspartate Aminotransferases			
	Multivariable Model		Multivariable + BMI Model		Multivariable Model		Multivariable + BMI Model	
	β (95% CI)	<i>p</i> -Value	β (95% CI)	<i>p</i> -Value	β (95% CI)	<i>p</i> -Value	β (95% CI)	<i>p</i> -Value
Women								
Adiponectin	-0.07 (-0.11, -0.02)	0.003	-0.03 (-0.07, 0.02)	0.2	0.04 (-0.004, 0.08)	0.08	0.04 (0.001, 0.08)	0.05
Leptin	0.10 (0.03, 0.17)	0.003	-0.05 (-0.10, -0.004)	0.03	-0.09 (-0.16, -0.02)	0.01	-0.10 (-0.14, -0.06)	< 0.001
Leptin Receptor	0.01 (-0.02, 0.05)	0.4	0.04 (0.003, 0.07)	0.03	0.06 (0.02, 0.09)	0.001	0.06 (0.03, 0.09)	< 0.001
FABP-4	0.11 (0.07, 0.14)	< 0.001	0.05 (0.02, 0.07)	0.001	0.04 (0.002, 0.07)	0.04	0.03 (0.006, 0.060)	0.02
Fetuin-A	0.05 (0.02, 0.08)	0.003	0.04 (0.006, 0.07)	0.02	0.01 (-0.02, 0.04)	0.4	0.01 (-0.02, 0.04)	0.4
RBP-4	0.01 (-0.01, 0.03)	0.1	0.01 (-0.008, 0.03)	0.2	0.02 (-0.003, 0.04)	0.1	0.02 (-0.003, 0.04)	0.1
Men								
Adiponectin	-0.14 (-0.18, -0.09)	< 0.001	-0.09 (-0.14, -0.05)	< 0.001	-0.01 (-0.05, 0.04)	0.8	0.02 (-0.03, 0.06)	0.4
Leptin	0.26 (0.20, 0.31)	< 0.001	0.07 (0.03, 0.11)	0.002	0.07 (0.01, 0.13)	0.02	-0.01 (-0.05, 0.03)	0.5
Leptin Receptor	-0.01 (-0.04, 0.03)	0.7	0.03 (-0.005, 0.06)	0.09	0.04 (0.01, 0.08)	0.01	0.06 (0.03, 0.09)	< 0.001
FABP-4	0.12 (0.09, 0.15)	< 0.001	0.04 (0.01, 0.07)	0.003	0.06 (0.03, 0.09)	<0.001	0.02 (-0.002, 0.05)	0.08
Fetuin-A	0.05 (0.02, 0.07)	<0.001	0.04 (0.01, 0.07)	0.003	0.04 (0.02, 0.07)	0.001	0.04 (0.01, 0.07)	0.003
RBP-4	0.04 (0.02, 0.05)	< 0.001	0.04 (0.02, 0.05)	< 0.001	0.03 (0.01, 0.04)	<0.001	0.03 (0.01, 0.04)	< 0.001

* Multivariable models adjusted for age, alcohol use, smoking status, physical activity index, postmenopausal status (women only), and hormone replacement therapy (women only).

Abbreviations: BMI, body mass index; CI, confidence Interval; FABP-4, fatty acid binding protein-4; RBP-4, retinol binding protein-4.