

Table S1. Prevalence of major cardiovascular disease risk factors among Hispanics/Latinos residing in 4 US urban centers, the Hispanic Community Health Study/Study of Latinos, 2008-2011*

	Bronx	Chicago	Miami	San Diego	P**
	% (95% CI)				
Women					
Obesity status					0.0001
Overweight ($25 \leq \text{BMI} < 30 \text{ kg/m}^2$)	32% (30, 35)	34% (32, 37)	34% (32, 37)	35% (32, 38)	
Obesity ($\text{BMI} \geq 30 \text{ kg/m}^2$)	48% (45, 51)	45% (42, 48)	38% (35, 40)	40% (36, 44)	
Cardiometabolic diseases					
Hypertension	25% (22, 27)	19% (17, 21)	22% (21, 24)	19% (17, 21)	<0.0001
Diabetes	17% (15, 19)	19% (17, 20)	13% (11, 15)	16% (14, 18)	<0.0001
Dyslipidemia	59% (56, 62)	64% (61, 67)	58% (55, 61)	58% (55, 61)	0.0126
Men					
Obesity status					0.0003
Overweight ($25 \leq \text{BMI} < 30 \text{ kg/m}^2$)	40% (36, 44)	40% (37, 43)	38% (35, 41)	44% (40, 49)	
Obesity ($\text{BMI} \geq 30 \text{ kg/m}^2$)	39% (36, 43)	38% (35, 41)	33% (31, 36)	36% (32, 40)	
Cardiometabolic diseases					
Hypertension	23% (20, 25)	18% (16, 20)	26% (23, 28)	20% (17, 23)	<0.0001
Diabetes	15% (13, 17)	16% (14, 18)	11% (9, 13)	15% (12, 18)	0.0004
Dyslipidemia	49% (45, 52)	56% (52, 59)	54% (52, 57)	52% (48, 56)	0.0105

*All values are age-adjusted and account for the complex survey design

**P-value derived from Wald F-statistic testing for any difference between groups

Table S2. Among women, weighted prevalence ratios (95% CIs) for hypertension, diabetes, and dyslipidemia associated with one standard deviation increase in obesity measures, stratified by Hispanic/Latino background*

Obesity measure	Hispanic/Latino background	Hypertension		Diabetes		Dyslipidemia	
		Prevalence ratio (95% CI)	P-interaction	Prevalence ratio (95% CI)	P-interaction	Prevalence ratio (95% CI)	P-interaction
BMI	Central American	1.36 (1.25, 1.49)	0.1548	1.53 (1.35, 1.74)	0.5651	1.15 (1.09, 1.22)	0.0224
	Cuban	1.21 (1.11, 1.33)		1.43 (1.29, 1.60)		1.16 (1.11, 1.22)	
	Dominican	1.37 (1.17, 1.61)		1.21 (0.93, 1.56)		1.17 (1.08, 1.26)	
	Mexican	1.39 (1.30, 1.50)		1.49 (1.36, 1.63)		1.18 (1.13, 1.24)	
	Puerto Rican	1.24 (1.13, 1.35)		1.40 (1.25, 1.57)		1.11 (1.06, 1.17)	
	South American	1.36 (1.18, 1.57)		1.56 (1.26, 1.93)		1.27 (1.15, 1.40)	
WC	Central American	1.37 (1.23, 1.51)	0.1074	1.64 (1.43, 1.88)	0.7105	1.20 (1.14, 1.27)	0.0263
	Cuban	1.18 (1.10, 1.27)		1.44 (1.32, 1.57)		1.16 (1.11, 1.21)	
	Dominican	1.35 (1.15, 1.58)		1.39 (1.10, 1.75)		1.21 (1.12, 1.32)	
	Mexican	1.33 (1.23, 1.45)		1.45 (1.31, 1.60)		1.18 (1.13, 1.24)	
	Puerto Rican	1.28 (1.17, 1.41)		1.54 (1.40, 1.70)		1.16 (1.11, 1.20)	
	South American	1.30 (1.12, 1.51)		1.55 (1.16, 2.06)		1.29 (1.16, 1.43)	
WHR	Central American	1.15 (1.01, 1.32)	0.6132	1.48 (1.27, 1.72)	0.6591	1.18 (1.10, 1.26)	0.0237
	Cuban	1.15 (1.07, 1.23)		1.58 (1.42, 1.75)		1.13 (1.07, 1.20)	
	Dominican	1.16 (1.04, 1.29)		1.45 (1.29, 1.62)		1.26 (1.18, 1.34)	
	Mexican	1.14 (1.00, 1.30)		1.49 (1.34, 1.65)		1.18 (1.12, 1.23)	
	Puerto Rican	1.18 (1.07, 1.30)		1.62 (1.46, 1.80)		1.19 (1.12, 1.26)	
	South American	1.26 (1.07, 1.50)		1.70 (1.36, 2.12)		1.30 (1.17, 1.45)	
WHtR	Central American	1.35 (1.21, 1.50)	0.1358	1.69 (1.45, 1.96)	0.6376	1.20 (1.14, 1.27)	0.0648
	Cuban	1.19 (1.11, 1.28)		1.45 (1.33, 1.58)		1.16 (1.11, 1.21)	
	Dominican	1.39 (1.18, 1.64)		1.39 (1.09, 1.78)		1.22 (1.12, 1.33)	
	Mexican	1.36 (1.25, 1.49)		1.47 (1.34, 1.61)		1.20 (1.15, 1.25)	
	Puerto Rican	1.25 (1.13, 1.38)		1.53 (1.39, 1.68)		1.16 (1.11, 1.21)	
	South American	1.28 (1.12, 1.45)		1.52 (1.15, 2.00)		1.28 (1.14, 1.43)	
%BF	Central American	1.48 (1.27, 1.72)	0.2545	1.71 (1.43, 2.05)	0.5889	1.17 (1.09, 1.25)	0.0706
	Cuban	1.24 (1.11, 1.37)		1.56 (1.34, 1.81)		1.21 (1.14, 1.28)	
	Dominican	1.35 (1.11, 1.64)		1.29 (0.95, 1.74)		1.22 (1.10, 1.35)	
	Mexican	1.35 (1.22, 1.50)		1.42 (1.24, 1.63)		1.18 (1.10, 1.26)	
	Puerto Rican	1.18 (1.02, 1.36)		1.44 (1.26, 1.65)		1.16 (1.08, 1.24)	
	South American	1.36 (1.08, 1.71)		1.60 (1.16, 2.21)		1.30 (1.15, 1.47)	
FMI	Central American	1.40 (1.27, 1.54)	0.1535	1.53 (1.34, 1.73)	0.7999	1.14 (1.08, 1.21)	0.0129
	Cuban	1.22 (1.11, 1.34)		1.46 (1.30, 1.62)		1.17 (1.11, 1.23)	
	Dominican	1.39 (1.18, 1.65)		1.25 (0.95, 1.64)		1.18 (1.09, 1.28)	
	Mexican	1.35 (1.26, 1.45)		1.43 (1.31, 1.57)		1.17 (1.12, 1.23)	
	Puerto Rican	1.21 (1.10, 1.32)		1.37 (1.23, 1.52)		1.12 (1.06, 1.18)	
	South American	1.38 (1.16, 1.63)		1.54 (1.17, 2.03)		1.29 (1.16, 1.43)	

*Standard deviations were computed as sex-specific but are equivalent across Hispanic/Latino background groups; values are adjusted for age, sampling scheme of the Hispanic Community Health Study /Study of Latinos (HCHS/SOL), Hispanic background, field center, nativity, education level, health insurance status, annually household income, smoking, alcohol consumption, and physical activity.

BMI, body mass index; WC, waist circumference; WHR, waist-to-hip ratio; WHtR, waist-to-height ratio; %BF, percent body fat; FMI, fat mass index.

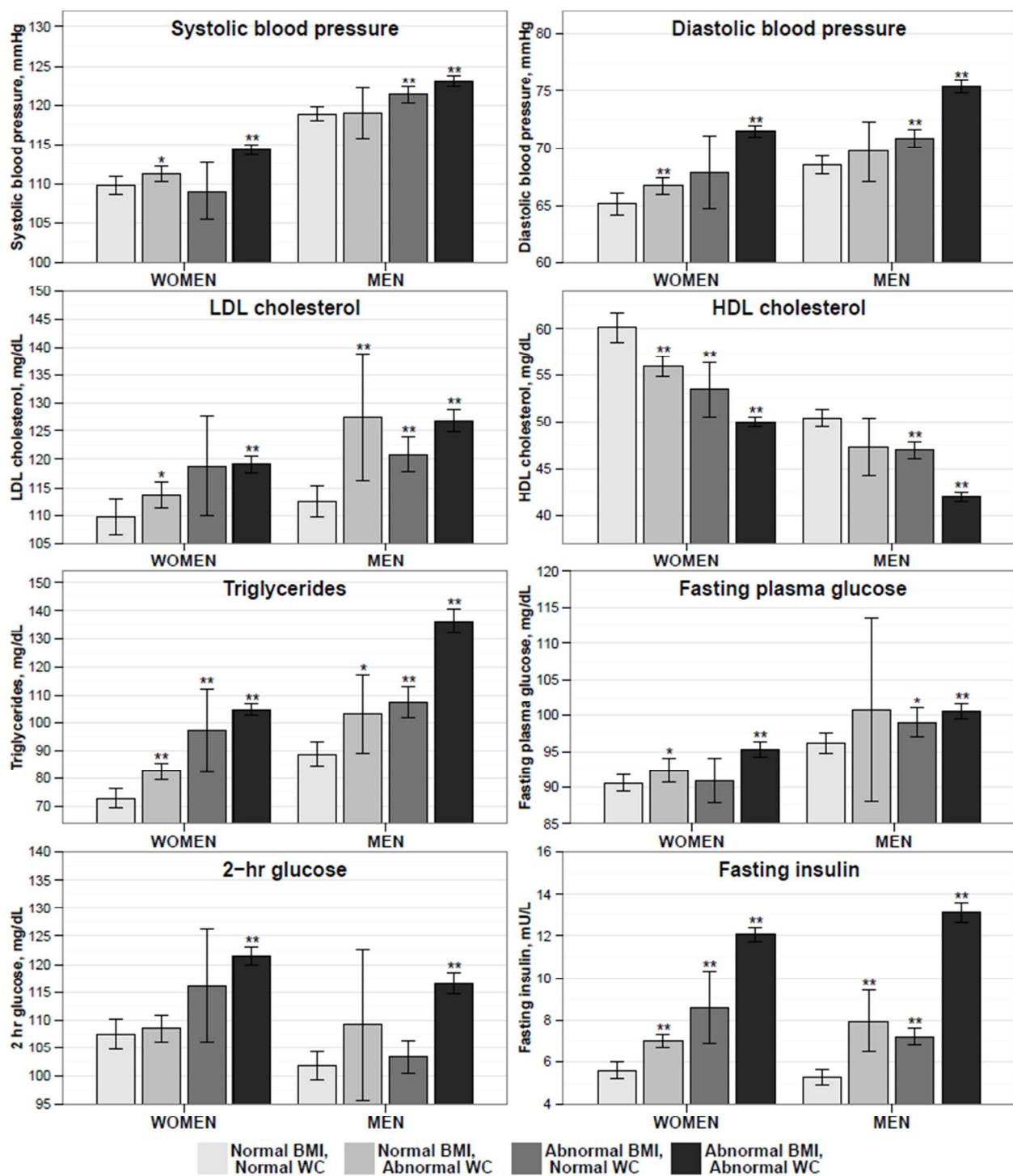
Table S3. Among men, weighted prevalence ratios (95% CIs) for hypertension, diabetes, and dyslipidemia associated with one standard deviation increase in obesity measures, stratified by Hispanic/Latino background*

Obesity measure	Hispanic/Latino background	Hypertension		Diabetes		Dyslipidemia	
		Prevalence ratio (95% CI)	P-interaction	Prevalence ratio (95% CI)	P-interaction	Prevalence ratio (95% CI)	P-interaction
BMI	Central American	1.47 (1.30, 1.67)	0.0619	1.19 (0.99, 1.43)	0.5772	1.21 (1.10, 1.32)	0.0871
	Cuban	1.28 (1.20, 1.36)		1.46 (1.30, 1.65)		1.18 (1.12, 1.25)	
	Dominican	1.48 (1.30, 1.69)		1.42 (1.12, 1.78)		1.27 (1.14, 1.41)	
	Mexican	1.39 (1.27, 1.51)		1.47 (1.31, 1.64)		1.21 (1.15, 1.29)	
	Puerto Rican	1.33 (1.21, 1.46)		1.46 (1.31, 1.64)		1.23 (1.17, 1.29)	
	South American	1.44 (1.13, 1.83)		1.39 (0.87, 2.21)		1.23 (1.09, 1.39)	
WC	Central American	1.48 (1.28, 1.72)	0.0141	1.35 (1.13, 1.61)	0.9337	1.21 (1.11, 1.32)	0.0146
	Cuban	1.24 (1.16, 1.33)		1.56 (1.38, 1.75)		1.16 (1.10, 1.23)	
	Dominican	1.41 (1.21, 1.64)		1.41 (1.12, 1.78)		1.32 (1.19, 1.47)	
	Mexican	1.41 (1.28, 1.56)		1.47 (1.30, 1.66)		1.25 (1.17, 1.33)	
	Puerto Rican	1.30 (1.18, 1.44)		1.49 (1.32, 1.67)		1.23 (1.17, 1.30)	
	South American	1.62 (1.32, 1.99)		1.52 (1.05, 2.19)		1.27 (1.13, 1.42)	
WHR	Central American	1.27 (1.09, 1.49)	0.0131	1.59 (1.31, 1.94)	0.9984	1.21 (1.11, 1.32)	0.0002
	Cuban	1.19 (1.10, 1.29)		1.54 (1.36, 1.73)		1.13 (1.07, 1.20)	
	Dominican	1.28 (1.11, 1.47)		1.52 (1.21, 1.92)		1.38 (1.25, 1.52)	
	Mexican	1.47 (1.33, 1.63)		1.53 (1.32, 1.78)		1.33 (1.25, 1.41)	
	Puerto Rican	1.27 (1.10, 1.47)		1.55 (1.29, 1.86)		1.28 (1.20, 1.37)	
	South American	1.60 (1.33, 1.92)		1.66 (1.25, 2.20)		1.27 (1.11, 1.44)	
WHtR	Central American	1.43 (1.26, 1.63)	0.0097	1.35 (1.13, 1.60)	0.8710	1.22 (1.11, 1.34)	0.0101
	Cuban	1.25 (1.16, 1.34)		1.57 (1.39, 1.78)		1.16 (1.10, 1.22)	
	Dominican	1.45 (1.26, 1.67)		1.46 (1.17, 1.82)		1.34 (1.20, 1.50)	
	Mexican	1.43 (1.29, 1.58)		1.46 (1.28, 1.67)		1.25 (1.18, 1.32)	
	Puerto Rican	1.32 (1.20, 1.45)		1.51 (1.35, 1.69)		1.23 (1.16, 1.30)	
	South American	1.64 (1.32, 2.04)		1.66 (1.13, 2.44)		1.25 (1.11, 1.41)	
%BF	Central American	1.33 (1.07, 1.64)	0.8021	1.29 (1.11, 1.50)	0.2840	1.24 (1.14, 1.34)	0.2160
	Cuban	1.32 (1.20, 1.45)		1.43 (1.27, 1.60)		1.20 (1.13, 1.26)	
	Dominican	1.50 (1.25, 1.81)		1.12 (0.89, 1.39)		1.32 (1.18, 1.49)	
	Mexican	1.35 (1.22, 1.49)		1.37 (1.19, 1.57)		1.24 (1.18, 1.31)	
	Puerto Rican	1.40 (1.25, 1.56)		1.52 (1.28, 1.79)		1.28 (1.20, 1.36)	
	South American	1.44 (1.16, 1.80)		1.27 (0.88, 1.83)		1.26 (1.10, 1.44)	
FMI	Central American	1.38 (1.15, 1.65)	0.2567	1.25 (1.08, 1.45)	0.2166	1.20 (1.11, 1.30)	0.1667
	Cuban	1.28 (1.19, 1.38)		1.42 (1.27, 1.58)		1.18 (1.12, 1.23)	
	Dominican	1.50 (1.24, 1.82)		1.10 (0.92, 1.33)		1.27 (1.11, 1.46)	
	Mexican	1.33 (1.23, 1.43)		1.40 (1.26, 1.55)		1.18 (1.12, 1.25)	
	Puerto Rican	1.37 (1.25, 1.51)		1.44 (1.28, 1.63)		1.22 (1.15, 1.29)	
	South American	1.45 (1.18, 1.77)		1.36 (0.93, 1.98)		1.25 (1.11, 1.41)	

*Standard deviations were computed as sex-specific but are equivalent across Hispanic/Latino background groups; values adjusted for age, sampling scheme of the Hispanic Community Health Study /Study of Latinos (HCHS/SOL), Hispanic background, field center, nativity, education level, health insurance status, annually household income, smoking, alcohol consumption, and physical activity.

BMI, body mass index; WC, waist circumference; WHR, waist-to-hip ratio; WHtR, waist-to-height ratio; %BF, percent body fat; FMI, fat mass index.

Figure S1. Mean (95% confidence interval) values of cardiometabolic markers according to normal and abnormal categories of BMI and WC.

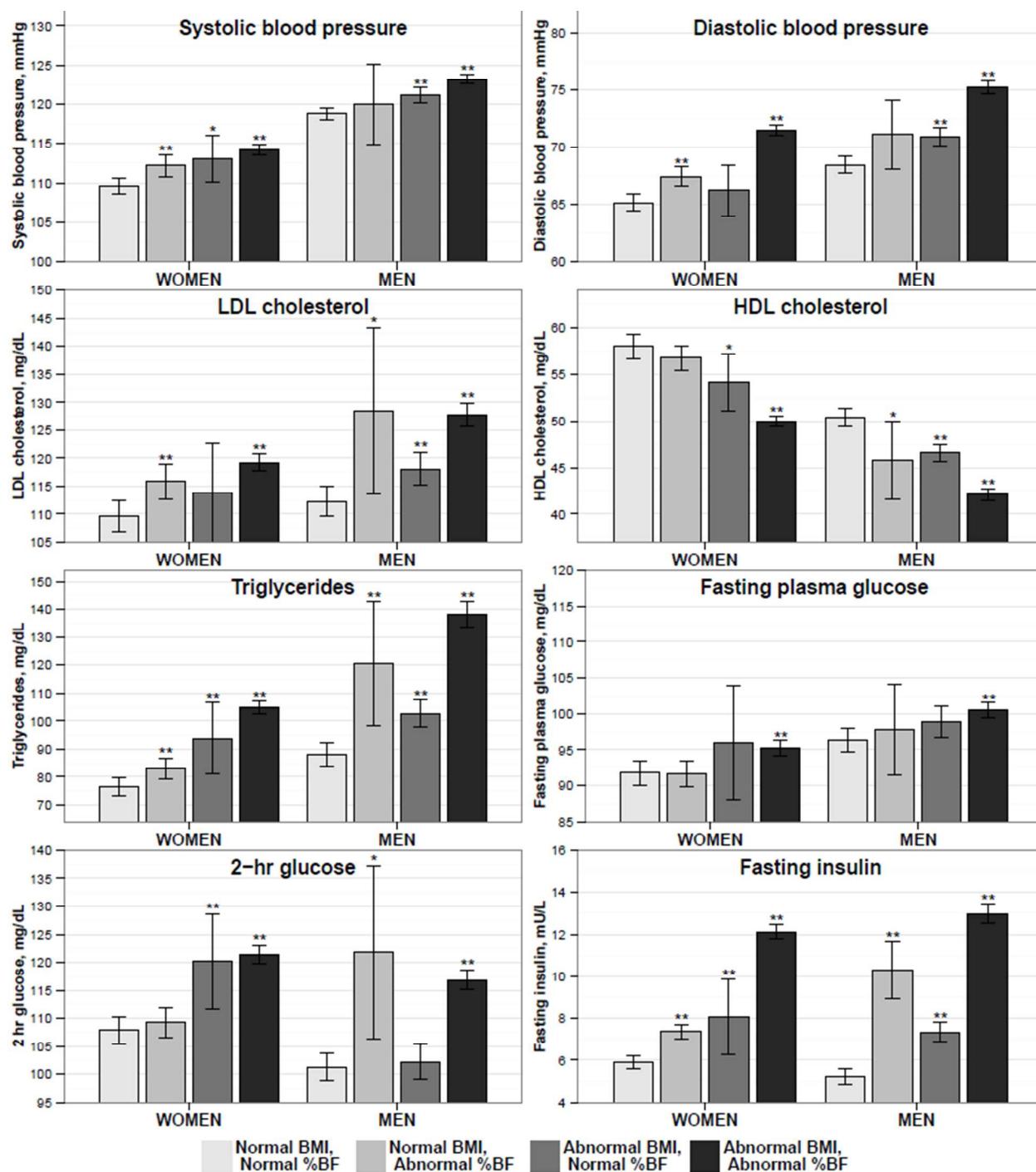


Values are adjusted for age, sampling scheme of the Hispanic Community Health Study /Study of Latinos (HCHS/SOL), Hispanic background, field center, nativity, education level, health insurance status, annual household income, smoking, alcohol consumption, and physical activity. Participants receiving medications for hypertension, diabetes, or dyslipidemia were excluded from the analysis for all cardiometabolic markers.

Significant differences in means between the groups: ** $P<0.01$ and * $P<0.05$ for comparison with the normal BMI and normal WC group.

Normal BMI: $18.5 \leq \text{BMI} < 25 \text{ kg/m}^2$; Abnormal BMI: $\text{BMI} \geq 25 \text{ kg/m}^2$. Normal WC: $< 94\text{cm}$ in men/ $< 80\text{cm}$ in women; Abnormal WC: $\geq 94\text{cm}$ in men/ $\geq 80\text{cm}$ in women. BMI, body mass index; WC, waist circumference.

Figure S2. Mean (95% confidence interval) values of cardiometabolic markers according to normal and abnormal categories of BMI and %BF.



Values are adjusted for age, sampling scheme of the Hispanic Community Health Study /Study of Latinos (HCHS/SOL), Hispanic background, field center, nativity, education level, health insurance status, annual household income, smoking, alcohol consumption, and physical activity. Participants receiving medications for hypertension, diabetes, or dyslipidemia were excluded from the analysis for all cardiometabolic markers.

Significant differences in means between the groups: ** $P<0.01$ and * $P<0.05$ for comparison with the normal BMI and normal BF% group.

Normal BMI: $18.5 \leq \text{BMI} < 25 \text{ kg/m}^2$; Abnormal BMI: $\text{BMI} \geq 25 \text{ kg/m}^2$. Normal %BF: <25% in men/<30% in women; Abnormal %BF: $\geq 25\%$ in men/ $\geq 30\%$ in women. BMI, body mass index; %BF, percent body fat