

SUPPLEMENTAL MATERIAL

Table S1. Baseline Characteristics of the Population with or without hypertension at Visit 1, HCHS/SOL 2008-2011.

	Visit 1 Participants who participated in Visit 2 Unweighted N=10,493	
	With Hypertension n=4,826	Without Hypertension n=5,667
Characteristic	% (95% CI)	% (95% CI)
Age group, yrs, %		
18-39	21.6 (19.6, 23.8)	63.5 (61.5, 65.4)
40-64	59.9 (57.7, 62.0)	34.2 (32.3, 36.1)
65-74	18.5 (16.7, 20.4)	2.3 (1.8, 3.0)
Female	48.5 (46.5, 50.6)	54.6 (52.6, 56.6)
Hispanic/Latino background, %		
Central American	7.1 (5.9, 8.6)	7.7 (6.4, 9.4)
Cuban	27.8 (23.9, 32.1)	15.7 (13.0, 18.8)
Dominican	10.6 (9.0, 12.5)	8.6 (7.2, 10.3)
Mexican	27.6 (24.5, 30.9)	44.8 (41.3, 48.5)
Puerto Rican	19.5 (17.3, 22.0)	13.0 (11.3, 14.8)
South American	3.7 (3.1, 4.4)	5.3 (4.3, 6.4)
Mixed/Other	3.6 (2.8, 4.6)	4.9 (4.0, 6.0)
< High school education, %	37.5 (35.1, 39.8)	29.0 (27.1, 31.0)
Annual income <\$30,000, %	65.9 (63.1, 68.5)	59.9 (57.7, 62.2)
Nativity/years in the mainland US, %		
< 10 years in US 50 states/DC	24.7 (22.2, 27.5)	31.0 (28.5, 33.5)
≥ 10 years in US 50 states/DC	60.6 (58.2, 63.0)	41.9 (39.9, 44.0)
Born in US 50 states/DC	14.6 (12.7, 16.8)	27.1 (25.1, 29.3)
Study Site		
Bronx, New York	30.0 (26.5, 33.6)	26.2 (23.2, 29.5)
Chicago, Illinois	12.2 (10.4, 14.3)	18.4 (16.0, 21.0)
Miami, Florida	36.2 (31.4, 41.3)	25.5 (21.6, 29.7)
San Diego, California	21.6 (18.4, 25.2)	30.0 (26.2, 34.0)

HCHS/SOL: Hispanic Community Health Study/Study of Latinos; LE8: Life's Essential 8; SE: standard error; US: United States

The distribution of each characteristic differed based on baseline hypertension status ($p < 0.05$ for all).

Table S2. Mean LE8 score among US Hispanics age standardized to the US age distribution, HCHS/SOL 2008-2011.

	Overall	Men	Women
	Mean (SE)	Mean (SE)	Mean (SE)
Overall	67.3 (0.2)	67.5 (0.3)	67.0 (0.3)
Hispanic/Latino background			
Central American	68.2* (0.4)	68.1* (0.7)	68.2* (0.6)
Cuban†	63.0* (0.4)	63.9* (0.6)	61.9* (0.5)
Dominican	69.1* (0.4)	69.3* (0.7)	68.9* (0.5)
Mexican†	71.4 (0.3)	71.1 (0.4)	71.7 (0.4)
Puerto Rican†	62.0* (0.4)	63.6* (0.5)	60.4* (0.5)
South American	69.6* (0.6)	70.6 (0.9)	69.1* (0.7)
Mixed/Other	66.6* (0.8)	66.4* (1.0)	66.6* (1.4)

SE: standard error

All estimates are age standardized to the following age distributions:

For overall estimates: age 18-39: 39.45%; age 40-64: 46.95%; age 65-74: 13.60%

For estimates among men: age 18-39: 42.0%; age 40-64: 46.2%; age 65-74: 11.8%

For estimates among women: age 18-39: 36.9%; age 40-64: 47.7%; age 65-74: 15.4%

†indicates estimate differs significantly by sex (p<0.05)

*indicates estimate differs significantly compared with Mexican American background (p<0.05)

Table S3. Life's Essential 8 CV Health Metrics means according to socio-economic characteristics among US Hispanics, among participants with at least 6 of 8 metrics, n=16,245, HCHS/SOL 2008-2011.

	Overall	Central American	Cuban	Dominican	Mexican (ref)	Puerto Rican	South American	Other/Mixed
	Mean (SE)	Mean (SE)	Mean (SE)	Mean (SE)	Mean (SE)	Mean (SE)	Mean (SE)	Mean (SE)
Characteristic								
Overall	68.0 (0.3)	69.2* (0.4)	62.1* (0.5)	70.0* (0.5)	72.6 (0.3)	61.7* (0.4)	69.9* (0.6)	69.5* (0.8)
Age group								
18-39 (ref)	72.5 (0.3)	72.7 (0.5)	68.9 (0.6)	73.3 (0.8)	75.3 (0.4)	66.4 (0.7)	75.0 (0.9)	71.9 (1.1)
40-64	64.3* (0.3)	65.9* (0.6)	58.8* (0.5)	67.1* (0.6)	69.6* (0.4)	58.5* (0.5)	66.8* (0.7)	65.0* (1.3)
65-74	60.6* (0.5)	62.0* (1.6)	58.2* (0.9)	62.5* (1.2)	65.7* (1.0)	58.0* (0.9)	61.5* (1.4)	61.2* (3.4)
Sex								
Male (ref)	68.0 (0.3)	69.0 (0.7)	63.0 (0.6)	70.3 (0.7)	72.0 (0.4)	63.1 (0.5)	70.5 (0.9)	69.6 (1.0)
Female	67.9 (0.3)	69.4 (0.5)	61.1* (0.5)	69.8 (0.7)	73.1* (0.4)	60.3* (0.5)	69.4 (0.7)	69.3 (1.3)
Education								
< high school	65.8* (0.3)	67.9* (0.6)	58.7* (1.0)	67.6* (0.7)	70.1* (0.4)	59.0* (0.6)	68.3 (1.1)	66.2 (2.2)
≥ high school (ref)	69.0 (0.3)	70.1 (0.5)	63.0 (0.5)	71.4 (0.7)	74.0 (0.4)	63.3 (0.5)	70.4 (0.7)	70.7 (0.9)
Annual income								
<\$30,000	66.7* (0.3)	69.0 (0.5)	60.7* (0.6)	68.6* (0.6)	71.7* (0.4)	60.4* (0.5)	68.4* (0.7)	69.2 (1.1)
≥ \$30,000 (ref)	70.3 (0.4)	69.9 (0.8)	64.5 (0.8)	73.4 (0.7)	73.8 (0.5)	63.9 (0.7)	73.1 (0.9)	70.3 (1.4)
Nativity/years in US								
< 10 years in US 50 states/DC (ref)	69.5 (0.4)	71.7 (0.6)	63.6 (0.5)	73.6 (0.8)	74.4 (0.6)	63.0 (1.6)	71.9 (1.0)	69.6 (2.6)
≥ 10 years in US 50 states/DC	66.6* (0.3)	67.3* (0.6)	59.6* (0.8)	68.3* (0.6)	71.6* (0.3)	59.3* (0.5)	68.1* (0.7)	66.7 (1.6)
Born in US 50 states/DC	69.1 (0.4)	71.7 (1.7)	66.8* (1.4)	70.5 (1.9)	72.9 (0.7)	63.8 (0.6)	72.4 (2.1)	71.4 (1.0)
Study Site								
Bronx, New York	66.6* (0.3)	69.4* (1.2)	63.0 (3.1)	70.1* (0.5)	71.7 (0.7)	61.3 (0.5)	68.1* (1.1)	71.0 (1.3)
Chicago, Illinois	71.3 (0.4)	73.3 (0.8)	69.7 (1.4)	73.6* (2.7)	73.7* (0.4)	62.8 (0.8)	74.3 (1.3)	70.7 (1.9)
Miami, Florida	63.8* (0.4)	67.9* (0.5)	62.0* (0.5)	66.0* (2.0)	71.3 (2.5)	60.9 (1.6)	68.7* (1.0)	66.5 (1.7)
San Diego, California (ref)	72.1 (0.4)	74.6 (1.6)	68.5 (1.9)	79.6 (1.3)	72.2 (0.4)	67.5 (3.6)	73.6 (2.3)	69.6 (1.7)

ref: reference; SE: standard error; US: United States

*indicates estimate differs from the given reference category (p<0.05).

Table S4. Life's Essential 8 CV Health Metrics means according to socio-economic characteristics among US Hispanics, HCHS/SOL 2008-2011.

	Diet	Physical Activity	Nicotine Exposure	Sleep Health	Body Mass Index	Blood Glucose	Blood Lipids	Blood Pressure
	Mean (SE)	Mean (SE)	Mean (SE)	Mean (SE)	Mean (SE)	Mean (SE)	Mean (SE)	Mean (SE)
Characteristic								
Education								
< high school	45.7* (0.9)	71.0* (0.9)	68.3* (0.9)	82.8* (0.5)	55.9* (0.7)	74.5* (0.7)	60.7* (0.7)	68.9* (0.9)
≥ high school (ref)	37.9 (0.8)	76.8 (0.7)	72.3 (0.7)	85.5 (0.4)	59.1 (0.6)	83.7 (0.4)	63.0 (0.5)	75.5 (0.5)
Annual income								
<\$30,000	40.1* (0.7)	73.8* (0.7)	69.1* (0.7)	84.0* (0.4)	56.7* (0.5)	79.3* (0.4)	61.1* (0.5)	71.8* (0.6)
≥ \$30,000 (ref)	42.9 (1.2)	78.5 (0.8)	74.5 (0.8)	86.1 (0.6)	59.1 (0.8)	83.0 (0.6)	63.5 (0.7)	76.4 (0.6)
Nativity/years in US								
< 10 years in US 50 states/DC (ref)	36.8 (1.3)	73.9 (1.0)	72.3 (1.1)	86.1 (0.5)	64.1 (0.7)	85.5 (0.5)	62.0 (0.8)	75.9 (0.8)
≥ 10 years in US 50 states/DC	48.5* (0.8)	72.5 (0.7)	73.1 (0.7)	85.0 (0.4)	55.0* (0.5)	74.5* (0.5)	57.5* (0.6)	67.9* (0.7)
Born in US 50 states/DC	27.2* (1.0)	82.0* (0.9)	86.1* (0.5)	81.9* (0.7)	57.0* (1.1)	88.5* (0.6)	73.2* (0.9)	82.3* (0.6)
Study Site								
Bronx, New York	30.3* (0.7)	78.9 (0.9)	71.2* (1.1)	81.1* (0.6)	55.2* (0.8)	80.2 (0.8)	67.0* (0.8)	71.9* (0.9)
Chicago, Illinois	53.7* (1.0)	78.5 (0.7)	71.8 (1.0)	85.0* (0.5)	57.3 (0.8)	79.7* (0.7)	64.9 (0.7)	80.8* (0.6)
Miami, Florida	27.4* (0.6)	67.2* (1.0)	67.2* (1.0)	85.5* (0.6)	60.2 (0.7)	80.9 (0.6)	56.2* (0.7)	66.9* (0.9)
San Diego, California (ref)	57.4 (1.0)	77.7 (1.1)	74.5 (1.2)	87.1 (0.6)	59.0 (1.1)	81.6 (0.7)	62.6 (0.9)	77.7 (0.8)

ref: reference; SE: standard error; US: United States

*indicates estimate differs from the given reference category (p<0.05).

Table S5. Life's Essential 8 CV Health Metrics among participants with at least 6 of 8 metrics, standardized to study site, n=16,245, HCHS/SOL 2008-2011.

	Overall	Central American	Cuban	Dominican	Mexican (ref)	Puerto Rican	South American	Other/Mixed
	Mean (SE)	Mean (SE)	Mean (SE)	Mean (SE)	Mean (SE)	Mean (SE)	Mean (SE)	Mean (SE)
LE8	68.0 (0.2)	71.0 (0.6)	65.2* (1.0)	72.0 (0.8)	72.0 (0.8)	63.1* (1.1)	70.7 (0.8)	69.3* (0.8)
LE8 Components								
Diet	40.0 (0.4)	42.8* (2.3)	28.2* (3.2)	57.6* (1.7)	51.4 (2.1)	19.0* (1.4)	38.2* (1.7)	36.7* (1.8)
Physical Act	75.3 (0.5)	80.8 (1.8)	76.6 (2.2)	81.1 (1.7)	81.9 (1.9)	75.2 (2.4)	75.8 (2.9)	80.0 (2.1)
Nicotine	70.3 (0.6)	78.9* (2.5)	72.4 (3.5)	83.5* (1.9)	68.8 (2.4)	61.0 (4.2)	78.6* (2.0)	66.9 (2.9)
Sleep Health	84.5 (0.3)	85.7 (1.6)	84.6 (1.9)	85.1 (1.5)	86.7 (1.9)	82.2 (1.7)	86.5 (1.0)	81.1* (1.5)
Body Mass Index	58.1 (0.4)	62.8 (1.7)	53.0* (2.5)	61.9 (1.6)	61.2 (1.9)	58.7 (2.2)	67.0* (1.3)	56.9 (2.1)
Blood Glucose	80.7 (0.3)	80.6 (1.7)	83.8 (2.0)	78.8 (5.8)	83.2 (1.4)	76.6* (1.9)	84.7 (1.3)	84.6 (1.7)
Blood Lipids	62.5 (0.4)	61.2 (2.0)	60.8 (4.3)	55.8 (7.6)	61.7 (2.5)	64.5 (2.5)	58.3 (2.2)	68.4 (2.3)
Blood Pressure	73.4 (0.4)	75.6* (1.7)	64.5* (3.4)	72.5* (4.9)	82.7 (1.4)	70.4* (2.1)	78.3 (1.6)	79.6 (1.7)

ref: reference; SE: standard error; US: United States

*indicates estimate differs from the given reference category (p<0.05).

Table S6. Associations between LE7† score and LE7† CV health with incident hypertension overall and by Hispanic/Latino background, HCHS/SOL 2008-2017.

	Overall	Central American	Cuban	Dominican	Mexican	Puerto Rican	South American	Mixed/Other
Exposure	IDR (95% CI)	IDR (95% CI)	IDR (95% CI)	IDR (95% CI)	IDR (95% CI)	IDR (95% CI)	IDR (95% CI)	IDR (95% CI)
LE7† (decrement of 10)	1.15* (1.09, 1.20)	1.32* (1.16, 1.52)	1.11* (1.02, 1.21)	1.13 (0.90, 1.42)	1.12* (1.03, 1.21)	1.18* (1.06, 1.32)	1.06 (0.90, 1.26)	1.13 (0.84, 1.54)
CV health								
Low vs high	1.96* (1.52, 2.52)	2.55* (1.19, 5.50)	1.89* (1.00, 3.60)	1.85 (0.59, 5.76)	1.57* (1.04, 2.36)	2.36* (1.22, 4.55)	3.49* (1.40, 8.68)	3.31 (0.70, 15.67)
Mid vs high	1.50* (1.22, 1.83)	1.42 (0.71, 2.85)	1.62 (0.87, 3.04)	1.25 (0.69, 2.24)	1.30 (0.99, 1.71)	1.61 (0.85, 3.04)	2.07* (1.01, 4.27)	5.95* (1.59, 22.26)

CI: confidence interval; CV: cardiovascular; HCHS/SOL: Hispanic Community Health Study/Study of Latinos; IDR: incidence density ratio; LE7: Life's Essential 7 †LE7 score was calculated as the average of seven of the eight LE8 components (diet, physical activity, nicotine, sleep health, body mass index, blood lipids, and blood glucose).

Models are adjusted for age, sex, Hispanic/Latino background (except in stratified), income, education, nativity, health insurance, marital status, field center, and baseline systolic blood pressure.

The interaction between Hispanic/Latino background group and each LE8 CV health metric p<0.10 for body mass index and diet only.

*Indicates estimates are significant (p<0.05)

CV health was defined as low (LE7 score < 50%), moderate (LE7 score 50 - <80%), or high (LE7 score