

Table - Association Between Metabolic Risk Factors, Mean Activity Counts, and Duration of Vigorous Activity

Trait	N	Mean CPM ($\times 100^{-1}$)			Vigorous PA, min $\cdot$ d $^{-1}$ ($\times 10^{-1}$)	
		Beta (SE)	P	P inter-action	Beta (SE)	P
BMI (kg $\cdot$ m $^{-2}$)						
Non-Hispanic Black	1364	-0.119 (0.027)	1.1×10^{-5}	0.25	-0.254 (0.099)	0.010
Non-Hispanic White	818	-0.183 (0.033)	3.3×10^{-8}		-0.238 (0.081)	0.0034
Hispanic	378	-0.092 (0.039)	0.019		-0.286 (0.134)	0.034
Total	2560	-0.131 (0.019)	2.0×10^{-12}		-0.247 (0.058)	1.9×10^{-5}
Waist circumference (cm)						
Non-Hispanic Black	1352	-0.127 (0.027)	2.7×10^{-6}	0.16	-0.296 (0.098)	0.0026
Non-Hispanic White	812	-0.208 (0.034)	9.2×10^{-10}		-0.286 (0.082)	5.3×10^{-4}
Hispanic	378	-0.100 (0.039)	0.0096		-0.226 (0.132)	0.088
Total	2542	-0.145 (0.019)	1.3×10^{-14}		-0.273 (0.058)	2.3×10^{-6}
Glucose (mg $\cdot$ dL $^{-1}$) ^a						
Non-Hispanic Black	1066	-0.036 (0.030)	0.23	0.21	0.001 (0.105)	0.99
Non-Hispanic White	725	-0.036 (0.033)	0.27		0.029 (0.078)	0.71
Hispanic	308	0.076 (0.042)	0.07		-0.006 (0.137)	0.97
Total	2099	-0.016 (0.020)	0.42		0.012 (0.059)	0.84
HOMA-IR (U)						
Non-Hispanic Black	1320	-0.124 (0.023)	1.3×10^{-7}	0.67	-0.115 (0.088)	0.19
Non-Hispanic White	804	-0.104 (0.029)	3.4×10^{-4}		-0.105 (0.070)	0.13
Hispanic	370	-0.068 (0.036)	0.061		-0.107 (0.123)	0.39
Total	2494	-0.108 (0.016)	4.5×10^{-11}		-0.103 (0.051)	0.042
Systolic BP (mm Hg)						
Non-Hispanic Black	1361	0.052 (0.026)	0.043	0.0083	-0.096 (0.095)	0.31
Non-Hispanic White	815	0.061 (0.030)	0.042		-0.119 (0.073)	0.10
Hispanic	376	-0.052 (0.037)	0.15		0.001 (0.126)	0.99
Total	2552	0.034 (0.017)	0.053		-0.096 (0.054)	0.076
Diastolic BP (mm Hg)						
Non-Hispanic Black	1361	0.072 (0.027)	0.0072	8.2×10^{-4}	-0.258 (0.099)	0.0092
Non-Hispanic White	815	0.042 (0.032)	0.20		-0.201 (0.079)	0.011
Hispanic	376	-0.070 (0.038)	0.069		-0.184 (0.132)	0.16
Total	2552	0.036 (0.018)	0.052		-0.228 (0.057)	6.8×10^{-5}
Heart Rate (bpm)						
Non-Hispanic Black	1361	-0.128 (0.026)	1.0×10^{-6}	0.47	-0.204 (0.096)	0.033
Non-Hispanic White	814	-0.143 (0.036)	8.0×10^{-5}		-0.480 (0.086)	3.3×10^{-8}
Hispanic	376	-0.059 (0.041)	0.15		-0.297 (0.141)	0.036
Total	2551	-0.117 (0.019)	7.0×10^{-10}		-0.336 (0.058)	7.6×10^{-9}
Triglycerides (mg $\cdot$ dL $^{-1}$) ^b						
Non-Hispanic Black	1349	-0.012 (0.024)	0.62	0.012	-0.152 (0.090)	0.089
Non-Hispanic White	813	-0.133 (0.036)	2.0×10^{-4}		-0.322 (0.086)	1.8×10^{-4}
Hispanic	374	-0.040 (0.043)	0.36		0.111 (0.148)	0.45
Total	2536	-0.055 (0.018)	0.0027		-0.208 (0.056)	2.2×10^{-4}
HDL-C (mg $\cdot$ dL $^{-1}$)						
Non-Hispanic Black	1349	0.096 (0.024)	7.6×10^{-5}	0.29	0.182 (0.09)	0.044
Non-Hispanic White	813	0.097 (0.032)	0.0029		0.217 (0.078)	0.0059
Hispanic	374	0.037 (0.038)	0.33		-0.034 (0.131)	0.80
Total	2536	0.085 (0.017)	1.1×10^{-6}		0.155 (0.054)	0.004

LDL-C (mg · dL ⁻¹)						
Non-Hispanic Black	1349	0.042 (0.027)	0.12		-0.034 (0.100)	0.73
Non-Hispanic White	813	0.026 (0.036)	0.47		-0.187 (0.088)	0.033
Hispanic	374	0.027 (0.043)	0.53		-0.099 (0.146)	0.50
Total	2536	0.033 (0.019)	0.082	0.96	-0.116 (0.060)	0.051

The reported beta coefficients are standardized, so that each represents a difference (in standard deviation units) in the response associated with a 100-point difference in mean CPM or a 10-min difference in the duration of vigorous PA. All analyses are adjusted for age, gender, ethnicity, BMI (except where BMI and waist circumference are the response) and diabetes as indicated. Vigorous activity duration is adjusted for mean CPM. All response variables except glucose and LDL-cholesterol were log transformed prior to analysis.

Abbreviations: BMI – body-mass index; BP – blood pressure; HDL-C – high-density lipoprotein cholesterol; LDL-C – low-density lipoprotein cholesterol. ^a Excludes diabetic individuals; ^b Adjusted for diabetes status in addition to other covariates